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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Title: Perfect score: US-10-774-147B-30 35 1 МКҮНКМ 6

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*
1: geneseqp1990s:\*
2: geneseqp1990s:\*
3: geneseqp2000s:\*
4: geneseqp2001s:\*
5: geneseqp2002s:\*
6: geneseqp2003as:\*
7: geneseqp2003bs:\* geneseqn1990s: \*
geneseqp2000s: \*
geneseqp2001s: \*
geneseqp2002s: \*
geneseqp2001as: \*
geneseqp2003bs: \*
geneseqp2004s: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

Result	Score	Query Match	Query Match Length DB	88	ID	Description
_	35	100.0	100.0 6 8	œ	ADR44749	Adr44749 Human leu
2	31	88.6	988	ۍ	ABB91122	Abb91122 Herbicida
ω	30	85.7	6	8	ADR44743	Adr44743 Human leu
4	30	85.7	6	œ	ADR44737	Adr44737 Human leu
S	30	85.7	54	4	AAU17915	Aau17915 Novel hum
0	30	85.7	54	7	ADG41295	Adg41295 Human res
7	30	85.7	54	7	ADI97069	Adi97069 Human res
8	30	85.7	79	ω	AAG35466	Aag35466 Arabidops
9	30	85.7	114	տ	ABP07404	Abp07404 Human ORF

44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24		22	21	20	19	18	17	16		14	13	12	11	10	
30 30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
85.7 85.7	85.7	85.7	85.7	85.7	85.7	85.7			85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	
485 485	485	485	485	467	467	467	463	449	444	439	338	333	315	306	277	258	245	217	215	215	215	206	206	206	199	190	190	190	190	153	153	153	140	125	
8 7	ω	ω	2	ω	ω	ω	ω	ω	ω	ω	7	4	0	0	4	4	ω	ω	ω	ω	ω	ω	ω	ω	4	σ	4	4	ω	ω	ω	ω	ω	ω	
ADF75199 ADN72983	AAG41407	AAG40086	AAW01459	AAG22957	AAG41408	AAG40087	AAY52216	AAG22958	AAG19285	AAG19286	ADH86481	AAG78291	ADA33577	ABU1 6944	AAB59393	ABB69297	AAG19287	ADN22861	AAG52998	AAG21896	AAG15861	AAG52999	AAG21897	AAG15862	AAM79852	ABG72175	AAM78868	AAB73220	AAB36085	AAG5 3000	AAG15863	AAG21898	AAG35464	AAG35465	
		σ	9	7	œ		·			σ	_		Ada33577 Acinetoba	Proteir			Aag19287 Arabidops				_		. 7		Aam79852 Human pro	Human	8 Human	0 Human		0		21898		Aag35465 Arabidops	

### ALI GNMENTS

ADR44749:	ADR44749	44749	ULT 1	
	standard;			
	peptide;			
	6			
	6 AA.			

Human leukocyte stimulating peptide, P19.

04-NOV-2004 (first entry)

Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

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RESULT 2
ABB91122
ID ABB9
XX
AC ABB9
XX
DT 31-P
                                                                                                                                                                           δδ
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                            the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New leukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune
              31-MAY-2002
                                            ABB91122;
                                                                                                                                                                                                                                                                       Sequence 6 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  response to bacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ryu S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-FEB-2003; 2003US-0455621P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-FEB-2004; 2004WO-KR000225
                                                                      ABB91122 standard; protein; 886 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a target cell stimulating peptide where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-604410/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2004069858-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified-site
                                                                                                                                                                                                                                                                                                     invention.
                                                                                                                                                                                                                                                                                                                 human leukocyte stimulating peptide. This sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bae Y, Park E,
                                                                                                                                                                1 MKYHKM 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POSTECH FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 30; 57pp; English.
                                                                                                                                                  мкүнкм 6
                                                                                                                                                                                                           100.0%; Score 35; DB 8; ilarity 100.0%; Pred. No. 1.8e+06; Conservative 0; Mismatches 0;
              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Suh P;
                                                                                                                                                                                                                                         Length 6;
                                                                                                                                                                                                                Indels
                                                                                                                                                                                                              0;
                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                              0;
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                                                                                                                            Matches
                                                             Best Local Similarity
Matches 5; Conserv
                                                                                           Query Match
                                                                                                                                                                   for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or amino acid sequences from plant organisms using suitable search parameters, where plant sequences having an E-value greater by a factor of 3 than the E-value of most similar non-plant sequences are selected. The polypeptides or nucleic acids encoding them are useful for identifying modulators. The identified modulators are useful as
                                                                                                                                                                                                                                                                                                                                                              Identifying plant target proteins for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from non-plant from plant with nucleic acid or amino acid sequences from non-plant
                                                                                                                            Sequence 886 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tietjen K, Weidler M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Herbicidally active polypeptide SEQ ID NO
                                                                                                                                                                                                                                                                                     The invention relates to identifying target proteins (ABB90790-ABB94016)
                                                                                                                                                                                                                                                                                                                Claim 5; SEQ ID NO 333; 261pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-269010/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-AUG-2001; 2001WO-EP009892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-AUG-2001; 2001WO-EP009892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200210210-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Arabidopsis thaliana.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Herbicidal; plant; agriculture; herbicide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (FARB ) BAYER AG.
487 MQYHKM 492
                               1 MKYHKM 6
                                                             Conservative
                                                                             88.6%;
                                                              ۲;
                                                                             Score 31; DB 5; Length 886; Pred. No. 6.4e+02;
                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      333.
                                                              0
                                                              Indels
                                                             ç
                                                              Gaps
```

Search completed: September 29, 2005, 12:31:11 Job time: 80.6667 secs

0

protein - protein search, using sw model

Run on: September 29, 2005, 12:04:53 ; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Title: Perfect score: US-10-774-147B-30 35 1 МКҮНКМ 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

A\_Geneseq\_16Dec04:\*
1: geneseqp1990s:\*
2: geneseqp1990s:\*
3: geneseqp2000s:\*
4: geneseqp2001s:\*
5: geneseqp2002s:\*
6: geneseqp2003as:\*
7: geneseqp2003as:\*
8: geneseqp2003as:\* geneseqn1980s:
geneseqn1990s:
geneseqn2000s:
geneseqn2001s:
geneseqn2002s:
geneseqn2003ss:
geneseqn2003ss:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

14 15					9	60	7	6	5	4	ω	2	1	Result No. Score
	30 85.7	_	_	30 85.7	30 85.7	30 85.7	30 85.7	30 85.7	30 85.7	30 85.7	30 85.7	31 88.6	35 100.0	
153 3	153 3	153 3	140 3	125 3	114 5	79 3	54 7	54 7	54 4	6 8	6	886 5	6 8	Query Match Length DB
AAG53000	AAG15863	AAG21898	AAG35464	AAG35465	ABP07404	AAG35466	ADI 97069	ADG41295	AAU17915	ADR44737	ADR44743	ABB91122	ADR44749	ID
			Aag35464 Arabidops	Aag35465 Arabidops	Abp07404 Human ORF	Aag35466 Arabidops	Adi97069 Human	Adg41295 Human	Aau17915 Novel	Adr44737 Human	Adr44743 Human	Abb91122 Herbicida	Adr44749 Human leu	Description

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	Į o
	30 85.7	85	85	85	85	85	85	85	85	85	85		85	85	85	85	85		85	85	85	30 85.7	85	85	85	85	85	30 85.7	a
485 8	485 7	485 3					467 3			444 3			333 4	315 6	306 6	277 4			217 8	215 3	215 3			206 3				190 4	1,061
ADN72983	ADF75199	AAG41407	AAG40086	AAW01459	AAG22957	AAG41408	AAG40087	AAY52216	AAG22958	AAG1 9285	AAG19286	ADH86481	AAG78291	ADA33577	ABU1 69 44	AAB59393	ABB69297	AAG19287	ADN22861	AAG52998	AAG21896	AAG15861	AAG52999	AAG21897	AAG15862	AAM79852	ABG72175	AAM78868	AAB/3220
Adn7298	Adf75199	Aag41407	Aag40086	Aaw0145	Aag22957	Aag41408	Aag40087	Aay52216	Aag22958	Aag19285	Aag19286	Adh86481	Aag78291	Ada33577	Abu1 6944	Aab59393	Abb69297	Aag19287	Adn22861	Aag52998	Aag21896	Aag15861	Aag52999	Aag21897	Aag15862	Aam7985	Abg72175	Aam78868	Aab/322
83 Thale cre											86 Arabidops	81 Enterococ	91 Mouse CD4	77 Acinetoba	Proteir	93 Murine pr	_	87 Arabidops							Arabi	52 Human pro	Human	Human	20 Human pno

### ALI GNMENTS

# RESULT 1 ADR44749 ADR44749 standard; peptide; 6 AA.

ADR44749;

04-NOV-2004 (first entry)

Human leukocyte stimulating peptide, P19.

Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

Homo sapiens.

Key Modified-site Location/Qualifiers

/note= "C-terminal amide"

W02004069858-A2.

```
RESULT 2
ABB9122
ID ABB9
XX ABB9
XX ABB9
XX ABB9
XX BB9
XX BB9
XX BB9
XX Herb
XX Herb
XX Herb
XX Arab
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                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                    diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 30; 57pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New loukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune
                                                                                                              31-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     neutrophils. The invention is also used to enhance immune response to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-604410/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-FEB-2003; 2003US-0455621P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-FEB-2004; 2004WO-KR000225.
                Arabidopsis thaliana
                                             Herbicidal; plant; agriculture; herbicide.
                                                                             Herbicidally active polypeptide SEQ ID NO 333.
                                                                                                                                              ABB91122;
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 6 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pathogens such as bacteria and viruses and in the treatment of infectious
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  response to bacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ryu S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-AUG-2004
                                                                                                                                                                              ABB91122 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (POST-) POSTECH FOUND.
                                                                                                                                                                                                                                                                                          1 MKYHKM 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bae Y, Park E,
                                                                                                                                                                                                                                                             мкүнкм б
                                                                                                                                                                                                                                                                                                                       100.0%; Score 35; DB 8; illarity 100.0%; Pred. No. 1.8e+06; Conservative 0; Mismatches 0;
                                                                                                              (first entry)
                                                                                                                                                                           protein; 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Suh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ρ,
                                                                                                                                                                              ⋧
                                                                                                                                                                                                                                                                                                                                                       Length 6;
                                                                                                                                                                                                                                                                                                                          Indels
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                                                                                                                                                                                                                                                                                                                          Gaps
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Run

97:

September 29, 2005, 12:15:33 ; Search time 20.6667 Seconds

(without alignments)
21.672 Million cell updates/sec

OM protein - protein search, using sw model

Title:

US-10-774-147B-30

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8
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                                                                     Job time : 80.6667 secs
                                                                                    Search completed: September 29, 2005, 12:31:11
                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                           amino acid sequences from non-plant organisms using suitable search parameters, where plant sequences having an E-value greater by a factor of 3 than the E-value of most similar non-plant sequences are selected.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Identifying plant target proteins for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or amino acid sequences from non-plant
                                                                                                                                                                                                                                                                           Sequence 886 AA;
                                                                                                                                                                                                                                                                                                                           The polypeptides or nucleic acids encoding them are useful for identifying modulators. The identified modulators are useful as
                                                                                                                                                                                                                                                                                                                                                                                                               for herbicidally active compounds, comprising aligning and comparing nucleic acid or amino acid sequences from plant with nucleic acid or
                                                                                                                                                                                                                                                                                                             herbicides
                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to identifying target proteins (ABB90790-ABB94016)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 5; SEQ ID NO 333; 261pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organisms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-269010/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tietjen K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-AUG-2001; 2001WO-EP009892.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-AUG-2001; 2001WO-EP009892.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-FEB-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W0200210210-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (FARB ) BAYER AG.
                                                                                                                                      487 MQYHKM 492
                                                                                                                                                                        1 МКҮНКМ 6
                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Weidler M;
                                                                                                                                                                                                        Conservative
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                       88.6%;
                                                                                                                                                                                                      Score 31; DB 5;
Pred. No. 6.4e+02;
1; Mismatches 0
                                                                                                                                                                                                                                       Length 886;
                                                                                                                                                                                                      0
                                                                                                                                                                                                      Gaps
```

0

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0
Maximum DB seq length: 2000000000 Total number of hits satisfying chosen parameters: Perfect score: Sequence: Database : Scoring table: 35 1 MKYHKM 6 BLOSUM62 Gapop 10.0 , Gapext 0.5 Issued\_Patents\_AA:\*

1: /cgn2\_6/ptodata/1/iaa/5A\_COMB.pep:\*

2: /cgn2\_6/ptodata/1/iaa/5B\_COMB.pep:\*

3: /cgn2\_6/ptodata/1/iaa/6B\_COMB.pep:\*

4: /cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\*

5: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\* 513545 seqs, 74649064 residues 513545

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

		ď				
Result		Query				
o o	Score	Match	Length	BG	ID	Description
1	31	88.6	583	4	US-09-248-796A-20244	Sequence 20244, A
2	30	85.7	140	ω	US-08-930-894-4	Sequence 4, Appli
ω	30	85.7	277	N	US-08-685-992-30	30
4	30	85.7	277	N	US-09-144-925-30	30,
ഗ	30	85.7	315	4	US-09-328-352-4864	4864
6	30	85.7	338	4	US-09-134-000C-4366	Sequence 4366, Ap
7	30	85.7	444	4	US-09-248-796A-19173	19173,
ω	30	85.7	463	4	US-10-067-443-3	Sequence 3, Appli
9	30	85.7	643	4	US-09-270-767-40779	
10	30	85.7	643	4	US-09-270-767-55995	Sequence 55995, A
11	29	82.9	312	4	US-09-248-796A-14231	Sequence 14231, A
12	29	82.9	418	4	US-09-543-681A-7378	Sequence 7378, Ap
13	29	82.9	423	4	US-09-270-767-46381	Sequence 46381, A
14	28	80.0	96	4	US-09-270-767-32375	Sequence 32375, A
15	28	80.0	380	4.	US-09-248-796A-21305	Sequence 21305, A
16	27	77.1	146	4	US-09-270-767-42622	Sequence 42622, A
17	27	77.1	151	4	US-09-270-767-45274	
18	27	77.1	174	4	US-09-902-540-11679	Sequence 11679, A
19	27	77.1	178	ω	US-09-134-001C-3908	Sequence 3908, Ap
20	27	77.1	220	4	US-09-710-279-1864	Sequence 1864, Ap
21	27	77.1	260	4	US-09-248-796A-18584	Sequence 18584, A
22	27	77.1	270	2	US-08-978-404B-8	Sequence 8, Appli
23	27	77.1	273	2	US-08-978-404B-3	Sequence 3, Appli

861 4	77.1 861 4	1 780 4	77.1 773 4	77.1 677 4	77.1 677 4	77.1 677 4	77.1 677 3	77.1 677 3	27 77.1 677 3	77.1 677 3	77.1 677 3	77.1 677 3	27 77.1 677 3	77.1 677 3	27 77.1 677 3	27 77.1 433 4	27 77.1 421 4	27 77.1 421 4	27 77.1 376 4	27 77.1 313 4	11.1 2/3 2
US-09-542-497A-10 Sequence 10, App.	Sequence	US-09-949-016-6372 Sequence 6372, Ap	US-09-949-016-10285 Sequence 10285, A	US-09-902-540-16113 Sequence 16113, /	US-08-472-679H-193 Sequence 193, App	US-08-472-679H-115 Sequence 115, App	193	US-08-375-992A-115 Sequence 115, App	US-08-488-237A-193 Sequence 193, App	US-08-488-237A-115 Sequence 115, App	US-08-686-968C-193 Sequence 193, Apr	US-08-686-968C-58 Sequence 58, Appl	US-08-295-802-115 Sequence 115, App	US-08-480-640A-193 Sequence 193, App	US-08-480-640A-115 Sequence 115, App	US-09-328-352-6503 Sequence 6503, A	US-09-438-185A-869 Sequence 869, App	US-09-198-452A-932 Sequence 932, App	US-09-248-796A-16143 Sequence 16143, J	US-09-543-681A-6835 Sequence 6835, Ap	US-U8-9/8-404B-0 Sequence b, Appli

Search completed: September 29, 2005, 12:42:01 Job time: 20.6667 secs

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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Title: Perfect score: US-10-774-147B-30 35

Sequence: 1 MKYHKM 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Published\_Applications\_AA:\*
1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep:\*
2: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep:\*

```
0: /cgn2_6/ptodata/1/pubpaa/USO9E_PUBCOMB.pep:*
1: /cgn2_6/ptodata/1/pubpaa/USO9E_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/USO9_RUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/USI0A_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/USI0A_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/USI0E_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/USI0E_PUBCOMB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/USI0E_PUBCOMB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/USI1A_PUBCOMB.pep:*
9: /cgn2_6/ptodata/1/pubpaa/USI1A_PUBCOMB.pep:*
10: /cgn2_6/ptodata/1/pubpaa/USI0_PUB.pep:*
11: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*
12: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
13: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
15: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                       /cgn2_6/ptcdata/1/pubpaa/USO6_NEW_PUB.pep:*
/cgn2_6/ptcdatta/1/pubpaa/USO6_PUBCOMB.pep:*
/cgn2_6/ptcdatta/1/pubpaa/USO7_NEW_PUB.pep:*
/cgn2_6/ptcdatta/1/pubpaa/USO7_NEW_PUB.pep:*
/cgn2_6/ptcdatta/1/pubpaa/USO8_NEW_PUB.pep:*
/cgn2_6/ptcdatta/1/pubpaa/USO8_DEOCMB.pep:*
/cgn2_6/ptcdatta/1/pubpaa/USO8_PUBCOMB.pep:*
/cgn2_6/ptcdatta/1/pubpaa/USO8_PUBCOMB.pep:*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	ω	2	<b></b>	No.	Result
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	35	Score	ı
85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	100.0	Match	Query
962	822	721	463	463	463	371	333	311	306	258	217	190	190	190	190	189	187	186	183	182	54	54	54	6	6	σ	Match Length	
15	16	20	15	15	14	15	9	16	15	20	15	15	14	13	13	14	15	16	15	16	15	14	9	16	16	16	B	
US-10-366-547-85	US-10-437-963-112463	US-11-097-143-16797	US-10-651-722-3	US-10-649-273-3	US-10-067-443-3	US-10-424-599-285296	US-09-788-626-31	US-10-739-930-9673	US-10-282-122A-44868	US-11-097-143-34683	US-10-369-493-5514	US-10-052-648A-82	US-10-087-887-95	US-10-044-205A-44	US-10-044-205A-42	US-10-087-887-94	US-10-052-648A-81	US-10-425-115-214464	US-10-424-599-233688	US-10-767-701-47283	US-10-212-872-533	US-10-074-095-533	US-09-764-860-533	US-10-774-147B-24	US-10-774-147B-18	US-10-774-147B-30	ID	
Sequence 85, Appl	Sequence 112463,	Sequence 16797, A	Sequence 3, Appli	Sequence 3, Appli	Sequence 3, Appli	Sequence 285296,	Sequence 31, Appl	Sequence 9673, Ap	Sequence 44868, A	Sequence 34683, A	5514	82,	95,	Sequence 44, Appl	42,	Sequence 94, Appl	Sequence 81, Appl	Sequence 214464,	Sequence 233688,	47283	Sequence 533, App	Sequence 533, App	Sequence 533, App	Sequence 24, Appl	Sequence 18, Appl	Sequence 30, Appl	Description	

111111111111111111111111111111111111111
1153 1291 150 160 139 141 152 152 153 166 167 177 1180 180 180 180 180 180 192 192 192 192 192 192 193
111111111111111111111111111111111111111
15 US-10-367-094-116 15 US-10-365-547-83 16 US-10-774-147B-32 14 US-10-087-8877-100 15 US-10-087-887-100 15 US-10-275-762-68 US-10-275-762-67 19 US-10-275-762-67 19 US-10-181-590-6 14 US-10-181-590-6 14 US-10-181-590-6 15 US-10-094-749-2359 15 US-10-094-749-2359 15 US-10-0952-648A-78 15 US-10-052-648A-78
US-10-367-094-116 US-10-365-547-83 US-10-774-147B-32 US-10-087-887-100 US-10-052-648A-80 US-10-275-762-67 US-10-275-762-67 US-10-275-762-67 US-10-181-90-6 US-10-181-90-6 US-10-087-887-18 US-10-087-887-18 US-10-082-648A-79 US-10-052-648A-79 US-10-052-648A-79 US-10-052-648A-79 US-10-052-648A-79 US-10-053-313-547 US-10-091-504-872 US-10-091-504-872 US-10-091-504-872 US-10-091-504-872

### **ALIGNMENTS**

```
RESULT 1

US-10-774-147B-30

Sequence 30, Application US/10774147B

Publication No. US20040248255A1

GENERAL INFORMATION:

APPLICANT: POSCO

APPLICANT: POSCO

APPLICANT: POSCO

APPLICANT: PARK, Eun-Young

APPLICANT: SUH, Pann-Ghill

TITLE OF INVENTION: LEUROCYTE STIMULATING PEPTIDES

FILE REFERENCE: 10050-03USA

CURRENT APPLICATION NUMBER: US/10/774,147B

CURRENT APPLICATION NUMBER: US 60/445,621

PRIOR APPLICATION NUMBER: US 60/445,621

PRIOR APPLICATION NUMBER: US 60/445,621

PRIOR APPLICATION NUMBER: US 60/445,621
                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 36
SOFTWARE: PatentIn version 3.3
SEQ ID NO 30
LENGTH: 6
TYPE: PRT
                                                                                                           US-10-774-147B-30
                                                                                                                            OTHER INFORMATION: Synthetic FEATURE:
NAME/KEY: Peptide
LOCATION: (1)..(6)
OTHER INFORMATION: P19
Query Match 100.0%; Score 35; DB 16; Length 6; Best Local Similarity 100.0%; Pred. No. 1.7e+06; Matches 6; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                   ORGANISM: Artificial sequence FEATURE:
```

0 Gaps

0;

밁 50 1 MKYHKM 6 ||||| 1 MKYHKM 6

Search completed: September 29, 2005, 12:49:47 Job time: 76.5 secs

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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:13:23; Search time 14.5 Seconds (without alignments) 39.814 Million cell updates/sec

Title: Perfect score: US-10-774-147B-30 35 1 МКҮНКМ 6

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

283416 seqs, 96216763 residues

Searched:

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR\_79:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

hypothetical prote	T20339	2		85.7	30	6
AcMNPV orf58 - Bom	T41803	N	171	85.7	30	G
conserved hypothet	AC0439	N	161	85.7	30	4
AcOrf-59 protein -	D72857	N	69	85.7	30	3
hypothetical prote	T32028	N	558	88.6	31	N
hypothetical prote	T34160	N	64	88.6	31	1
Description	No. Score Match Length DB ID	BB	Query Score Match Length DB ID	Query Match	Score	No.
				٠		

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	80	7
27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30
77.1	77.1	77.1		77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	80.0	80.0	80.0	80.0	80.0	80.0	•	80.0	•	80.0	•	•	82.9	82.9	•	85.7	•	•	85.7	•	85.7	•	85.7	85.7	85.7	•
273	270	256	256	229	217	209	207	189	189	150	65	65	3394	1030	642	642	480	325	325	315	260	166	447	442	328	242	1652	1291	1273	754	580	555	485	463	435	314	259	237
Ν	2	N	N	2	-	-	2	N	2	2	2	2	N	N	N	N	2	N	N	N	2	2	2	2	2	2	N	_	_	2	Ν	N	Ν	N	2	2	Ν	Ν
A47246		- 1	B81691	A89997	B44570	S48459	G70198	C89992	T30408	T23684	AG1649	AF1590	T18501	S73460	D90558	G82886	B45600	S32212	T00161	T05512	T28182	T08580	T19112	T37733	T28363	E71621	T16799	A28334	TDRTLT	S52816	T28725	S56946	C71400	E84888	T49082	G90191	T11068	A69490
tryptase (EC 3.4.2	mast cell tryptase	a	77	hypothetical prote	pate (	probable dual spec	ш	-	_		_		ical pro	case	۲۷.		-rich b	chain	hair					otheticà	ORF MSV202 hypothe		hypothetical prote	yrosine-	leukocyte common a	probable membrane	hypothetical prote	probable membrane	adenosylhomocystei		hypothetical prote	pothe		LSU ribosomal prot

Search completed: September 29, 2005, 12:39:50 
Job time:  $14.5 \,\, \mathrm{secs}$ 

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments)
43.893 Million cell updates/sec

Title: US-10-774-147B-30
Perfect score: 35
Sequence: 1 MKYHRM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters:

1612378

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : UniProt\_03:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	0,	5	4	ω	2	<b>-</b>	NO.	Result
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	32	32	32	32	32	35	Score	
85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	91.4	91.4	91.4	91.4	91.4	100.0	Match Length	Query
238	237	229	217	215	215	190	190	189	172	171	161	128	121	69	924	886	631	558	276	218	121	121	3452	1069	962	191	83	485		
-	_	2	N	2	N	2	-	N	N	N	N	N	2	-	2	N	2	2	-	2	2	2	_	2	2	2	2	-	B	
RL2_METAC	RL2_ARCFU	Q18969	Q9LJR8	Q8VWI1	QBLD09	Q9Y346	DUSL_HUMAN	Q9D9D8	Q8B9J2	092424	Q8ZB19	Q7YY19	Q8C3M6	Y059_NPVAC	Q9FXJ6	Q9FYK0	Q9XD02	016656	IBP2_BRARE	Q8T2Q1	Q9KGQ5	Q9MCC4	ASPM_CANFA	Q6BI56	Q9DUT3	Q7Q581	Q76YH3	SAHH_PETCR	ID	
Q8tru4 methanosarc	028357 archaeoglob	Q18969 caenorhabdi	Q91jr8 arabidopsis	Q8vwil arabidopsis		Q9y346 homo sapien	Q9h596 homo sapien	Q9d9d8 mus musculu	Q8b9j2 rachiplusia	092424 bombyx mori		Q7yy19 cryptospori	Q8c3m6 mus musculu	P41463 autographa	Q9fxj6 arabidopsis	Q9fyk0 arabidopsis	Q9xd02 streptococc	016656 caenorhabdi	ω		Q9kgq5 vibrio para	Q9mcc4 bacteriopha	P62286 canis famil	Q6bi56 debaryomyce		Q7q581 anopheles g	Q76yh3 bacteriopha	Q01781 petroselinu	Description	

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
485	485	485	480	445	435	422	378	314	306	286	259	259	258	240	238
N	N	₩.	N	N	N	N	N	N	N	N	N	N	N	N	_
QBLPSB	QBLE20	SAHH_ARATH	022145	Q7RH06	Q9SV01	Q6YQR6	Q65A84	Q97ZV8	Q833M3	Q74M16	Q8HN50	047576	Q9VFX4	Q6FV58	RL2_METMA
Q81ps8	Q81e20	023255		٠.		Q6yqr6			Q833m3	Q74m16	Q8hn50	047576	Q9vfx4	Q6fv58	Q8pv47
281ps8 arabidopsis	arabidopsis	arabidopsis	arabidopsis	plasmodium	arabidopsis	onion yello	caenorhabdi	sulfolobus	enterococcu	lactobacill	brugia mala	onchocerca	drosophila	candida gla	methanosarc

# ALIGNMENTS

გ ვ	3 :	റ്റ	ဂ္ဂ	ឧ	RL	RT	RT	RA.	RP	RN	R.	RT	RT	RT	R.A	RX	RC	RP	R	ox	ဂ္ဂ	ဂ္ဂ	ဂ္ဂ	ဂ္ဂ	SO	9	DE	DE	ΡŢ	ᄗ	DI.	ΑĊ	ID	RES
concentration of adenosylhomocysteine.	CONTROL Of mothylations wis rocallation of the treatment and	therefore adenosylhomocysteinase may play a key role in the		-!- FUNCTION: Adenosylhomocysteine is a competitive inhibitor of S-	Plant Mol. Biol. 12:227-234(1989).	treated parsley cells.";	"Differential early activation of defense-related genes in elicitor-	Somssich I.E., Bollmann J., Hahlbrock K., Kombrink E., Schulz W.;	SEQUENCE OF 259-485 FROM N.A.	[2]	Proc. Natl. Acad. Sci. U.S.A. 89:4713-4717(1992).	leaves of Petroselinum crispum.";	and S-adenosyl-L-homocysteine hydrolase mRNAs in cultured cells and	"Induction by fungal elicitor of S-adenosyl-L-methionine synthetase	Kawalleck P., Plesch G., Hahlbrock K., Somssich I.E.;	MEDLINE=92262510; PubMed=1374911;	TISSUE=Leaf;	SEQUENCE FROM N.A.	[1]	NCBI_TaxID=4043;	Apium clade; Petroselinum.	campanulids; Apiales; Apiaceae; Apioideae; apioid superclade;	Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;	Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;	Petroselinum crispum (Parsley) (Petroselinum hortense).	Name=SAHH; Synonyms=SHH;		Adenosylhomocysteinase (EC 3.3.1.1) (S-adenosyl-L-homocysteine		(Rel.	01-APR-1993 (Rel. 25, Created)	Q01781;	SAHH PETCR STANDARD; PRT; 485 AA.	RESULT 1

\( \text{S} \) \( \text{T} \) \( \te

Search completed: September 29, 2005, 12:38:17 Job time: 71 secs

B 65

4

OM protein - protein search, using sw model

September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Perfect score: Title: US-10-774-147B-31 34

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5 1 MKYHVM 6

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*
1: geneseqp1990s:\*
2: geneseqp1990s:\*
3: geneseqp2000s:\*
4: geneseqp2001s:\*
5: geneseqp2003as:\*
6: geneseqp2003as:\*
7: geneseqp2003as:\* geneseqp2002s:\*
geneseqp2003as:\*
geneseqp2003bs:\*
geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

w

1 34 100.0 6 8 ADR44750 2 34 100.0 109 4 AAV16530 3 34 100.0 109 6 ABJ955599 3 34 100.0 280 5 ABJ99912 5 34 100.0 366 4 AAV16107 6 34 100.0 366 6 ABJ955176 6 34 100.0 366 6 ABJ955176 7 34 100.0 366 6 ABJ955176 8 34 100.0 366 6 ABJ95649 8 34 100.0 490 6 AAV16409 9 34 100.0 490 6 AAV16400 9 34 100.0 534 7 ADG42180 AAC16430 Human nov	Result No.	Score	Query Match	Query Match Length DB	BB	ID	Description
100.0 109 4 AAU16530 Human 100.0 109 6 ABU55599 Abu55599 Human 100.0 280 5 ABB9912 Abu55599 Human 100.0 280 6 AAU16107 Aau16107 Human 100.0 366 4 AAU16107 Aau16107 Abu55176 Human 100.0 366 6 ABU55176 Abu55176 Human 100.0 366 6 ABU56107 Abu55176 Human 100.0 490 5 ABP69649 Abu56969 Human 100.0 490 6 AAU16430 Aau16430 Human 100.0 534 7 ADG42180 Adg42180 Adg42180 Human 100.0 534 7 ADG42180	1	34	100.0	6	۵	ADR44750	Adr44750 Human leu
100.0 109 6 ABU55599 Human 100.0 280 5 ABB99912 Abb99912 Human 100.0 366 4 AAU16107 Aau16107 Human 100.0 366 6 ABU55176 Abu55176 Human 100.0 366 6 ABU55176 Abu55176 Human 100.0 490 6 AA016409 Abu59649 Human 100.0 490 6 AA016430 Aa016430 Human 100.0 534 7 ADG42180 Adg42180 Human Adg42180 Human 100.0 534 7 ADG42180	N	34	100.0	109	4	AAU1 6530	Aau16530 Human nov
100.0 280 5 ABB99912 Abb99912 Human 100.0 366 4 AAU16107 Human 100.0 366 6 ABU55176 Abu55176 Human 100.0 490 5 ABP69649 Abp69649 Human 100.0 490 6 AA016430 Aa016430 Aa016430 Human 100.0 534 7 ADG42180 Adg42180 Adg42180 Human	ω	34	100.0	109	σ	ABU55599	Human
100.0 366 4 AAU16107 Aau16107 Human 100.0 366 6 ABU55176 Human 100.0 490 5 ABD569649 Abp69649 Human 100.0 490 6 AA016430 Aa016430 Human 100.0 534 7 ADG42180 Adg42180 Human	4	34	100.0	280	თ	ABB99912	Human
100.0 366 6 ABU55176 Human 100.0 490 5 ABP65649 Abp69649 Human 100.0 490 6 AA016430 Aa016430 Human 100.0 534 7 ADG42180 Adg42180 Human	5	34	100.0	366	4	AAU1 61 07	Human
100.0 490 5 ABP69649 Abp69649 Human 100.0 490 6 AA016430 Aao16430 Human 100.0 534 7 ADG42180 Adg42180 Adg42180 Human	6	34	100.0	366	0	ABU55176	Human
100.0 490 6 AA016430 Aao16430 Human 100.0 534 7 ADG42180 Adg42180 Adg42180 Human	7	34	100.0	490	ű	ABP69649	Human
100.0 534 7 ADG42180 Adg42180 Human	ω	34	100.0	490	0	AA016430	Human
	9	34	100.0	534	7	ADG42180	Human

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	3	34	
88.2	88.2		8	œ	œ	8	œ	8	8	œ	œ	æ	œ	8	œ	æ	œ	œ	æ	:	:	:		:-	:	:	:	ŗ	:-	:-	1.	·	:-	91.2		
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AAM41109	AAU21820	AAU22098	ADM48580	ADM74734	ADA5 4791	ABB82163	AAB85360	AAM39323	AAB73221	AAB19008	ABG37020	AAM02967	ABG49053	AAM55008	AAM67394	ABB29053	AAM27685	ABB34215	AAM1 5224	AAG21142	AAG21143	AAG21144	AAG17191	AAG42863	AAG06491	AAY67409	AAW88440	AAY67405	AAG42864	AAG17192	AAG06492	AAG42865	AAG06493	AAG1 71 93	ADA55339	
Aam41109 Human pol	Aau21820 Novel hum	Human	Dual s	Adm74734 Human tyr	Ada54791 Human pro	Abb82163 Human NOV	Human	Human	Aab73221 Human pho			Peptid		Human	Aam67394 Human bon		Peptide	Peptide								Aay67409 Arabidops					N		ω	3 Arabi	Ada55339 Human pro	

### ALI GIMENTS

RESULT 1 ADR44750 ADR44750 standard; peptide; 6 AA. ADR44750;

Human leukocyte stimulating peptide, P20.

04-NOV-2004 (first entry)

Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

Homo sapiens.

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RESULT 2
AAU16530
ID AAU1
XX
AC AAU1
XX
AC AAU1
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DT 07-N
XX
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                                                                                                                                 Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                             The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious
          07-NOV-2001
                             AAU16530;
                                                                                                                                                                       Sequence 6 AA;
                                                                                                                                                                                                 diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the
                                                                                                                                                                                                                                                                                                                          New leukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune
                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 31; 57pp; English.
                                                                                                                                                                                                                                                                                                                   response to bacteria.
                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-604410/58.
                                                                                                                                                                                                                                                                                                                                                                                    Ryus,
                                                                                                                                                                                                                                                                                                                                                                                                                                  07-FEB-2003; 2003US-0455621P
                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-FEB-2004; 2004WO-KR000225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
Modified-site
                                               AAU16530 standard; protein; 109 AA.
                                                                                                                                                                                           invention.
                                                                                                                                                                                                                                                                                                                                                                                                      (POSC-) POSCO.
(POST-) POSTECH FOUND.
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                                                                                                      1 MKYHVM 6
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                                                                                               мкунум 6
                                                                                                                                 100.0%; Score 34; Di
illarity 100.0%; Pred. No. 1.1
Conservative 0; Mismatches
          (first entry)
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14-AUG-2000;
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22-AUG-2000;
23-AUG-2000;
30-AUG-2000;
30-AUG-2000;
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07-JUL-2000;
07-JUL-2000;
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14-AUG-2000;
14-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; opthalmalogical; vulnerary; secreted protein; rheumatoid arthritis; hyperproliferative disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-JUL-2000;
11-JUL-2000;
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28-JUN-2000;
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17-MAR-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human novel secreted protein, Seq ID 1483
                                                                                                                                                                                                                                                                                                         14-AUG-2000;
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2000US-0180628P
2000US-018464P
2000US-0189874P
2000US-0189874P
2000US-0189874P
2000US-0205515P
2000US-0216880P
2000US-0216880P
2000US-0217486P
2000US-0217496P
2000US-0217496P
2000US-0217496P
2000US-02182963P
2000US-0225963P
2000US-022513P
2000US-0225214P
2000US-0225214P
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2000US-0225214P
2000US-022579P
2000US-022668P
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2000US-02277182P
2000US-0229874P
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01-SEP-2000;
01-SEP-2000;
01-SEP-2000;
05-SEP-2000;
06-SEP-2000;
08-SEP-2000;
08-SEP-2000;
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08-SEP-2000;
11-SEP-2000;
12-SEP-2000;
13-SEP-2000;
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13-SEP-2000;
25-SEP-2000;
27-SEP-2000;
27-SEP-2000;
27-SEP-2000;
28-SEP-2000;
29-SEP-2000;
20-OCT-2000;
20-OC
2000US-0229449

2000US-0229449

2000US-0229449

2000US-0239459

2000US-0239439

2000US-02312449

2000US-02312449

2000US-02314149

2000US-02314149

2000US-02319689

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2000US-023689

2000US-023699

2000US-0246779

2000US-0246779

2000US-0246779

2000US-0246678

2000US-0246679

2000US-0246678
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08-NOV-2000)
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08-NOV-2000)
08-NOV-2000)
08-NOV-2000)
17-NOV-2000)
17-NO
                                   Claim
                                                                      New nucleic acid molecules encoding 461 diagnosing, preventing, treating or amel used as food additives or preservatives.
                                                                                                                                                                                                                 Rosen
                                                                                                                                                       WPI; 2001-488783/53.
N-PSDB; AAS26517.
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                                                                                                                                                                                                                                                        HUMAN
                                   SEQ
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                                                                                                                                                                                                                                                                                           2000US-0246524P.
2000US-0246525P.
2000US-0246528P.
2000US-0246610P.
2000US-0246611P.
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2000US-0246611P.
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2000US-0249211P.
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2000US-02511989P.
2000US-025198P.
2000US-025198P.
2000US-02511989P.
2000US-0251989P.
2000US-0259678P.
                                   ID NO 1483;
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                                                                                                                                                                                                                 Ruben
                                 980pp; English.
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                                                                                         461 human secreted ameliorating medica
                                                                                           medical conditions
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RESULT 3
ABU5599
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AC ABU5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
                                                                                                                                                                                                                                                                                                             Human; neural disorder; immune system disorder; renal disorder; muscular disorder; respiratory disease; reproductive disorder; gastrointestinal disorder; pulmonary disorder; cardiovascular disorder; hyperproliferative disorder; inflammatory disease; allergic reaction; blood related disorder; cancer; immunosuppressive; antiinflammatory;
                                                                                                                                           Ното
                                                                                                                                                                                                                                                cardiovascular; nephrotropic; cytostatic; antiallergic; thrombolytic;
haemostatic; antiarteriosclerotic.
   19-SEP-2002
                                                                   US2002132753-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human novel polypeptide #686.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABUSSS99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABU55599 standard; protein; 109 AA.
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                                                                                                                                           sapiens.
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17-JAN-2001;
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2001US-00764864

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29-SEP-2000;
02-OCT-2000;
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03-OCT-2000;
20-OCT-2000;
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08-SEP-2000;
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30-AUG-2000;
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(RUBE/)
(BARA/)
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) ROSEN C A.
) RUBEN S M.
) BARASH S C.
                                                                              2000US-0179065P
2000US-0118062PP
2000US-011806PP
2000US-021486PP
2000US-021486PP
2000US-021789PP
2000US-021789PP
2000US-0218519P
2000US-022547PP
2000US-022558PP
2000US-022558PP
2000US-022558PP
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2000US-023703PP
2000US-023461PP
2000US-023466PP
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RESULT 4
ABB9912
ID ABB9
XX ABB9
XX ABB9
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XX HUm
XX Hum
XX Hum
XX Fec
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Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 109 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nasal vestibulitis, nasal polyps and sinusitis), reproductive disorders, gastrointestinal disorders, pulmonary disorders, cardiovascular disorders
                CN1345807-A
                                                                        Human; macroprotein 1196-30.80; human KIAA1196 protein homologue; recombinant production; gene therapy; dementia; facial paralysis.
                                                                                                                                                 30-JAN-2003
                                                                                                                                                                                                         ABB99912 standard; protein; 280 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to human novel polypeptides and their associated polymucleotides. The polypeptides and polymucleotides are useful in gene therapy for treating, inhibiting or preventing neural disorders, immune system disorders (e.g. systemic lupus erythematosus, rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 11; SEQ ID NO 1483; 402pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New polypeptides and nucleic acids, useful in gene therapy for treating, inhibiting or preventing e.g. neural, immune system, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular or
                                             Homo sapiens
                                                                                                                   Human macroprotein 1196-30.80.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and multiple sclerosis), muscular disorders, respiratory diseases (e.g.
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Pred. No. 5.8;
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RESULT 5
AAU16107
ID AAU1
        Query Match 100.0%;
Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to human macroprotain 1196-30.80 (ABB99912) and nucleic acids encoding it (ABV/6281). The protain has a molecular weight of 30.8 kD and has 46% identity and 59% homology over a 176 amino acid stretch with human KIAA1196 protain (Genbank accession number AB03022). The invention also relates to a method for the recombinant production of the protain, and the use of the protain, can antagonist of the protain, and the use of the protain, can and approach in the protain, and the use of the protain.
                         secreted protein; rheumatoid arthritis; hyperproliferative disorder; cardiovascular disorder; cardiac arrest; cerebrovascular disorder; cerebral ischaemia; angiogenesis; nervous system disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene and antagonist in therapeutic applications. Macroprotein 1196-30.80 can be used in the treatment of a variety of diseases such as dementia and facial paralysis. The present sequence represents human macroprotein 1196-30.80
                                                                                                     cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; opthalmalogical; vulnerary;
                                                                                                                                                                Human; immunosuppressive; antiarthritic; antirheumatic; cytostatic;
                                                                                                                                                                                                                                                                           07-NOV-2001
                                                                                                                                                                                                                                                                                                                                 AAU16107;
                                                                                                                                                                                                                                                                                                                                                                                      AAU16107 standard; protein; 366 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 280 AA;
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Alzheimer's disease; infection; ocular disorder; corneal infection,
                                                                                                                                                                                                                Human novel secreted protein, Seq ID 1060.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 26-27 (Disclosure); 33pp; Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-SEP-2000; 2000CN-00125427
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Conservative
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Pred. No. 17;
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17-NOV-2000;
01-DEC-2000;
05-DEC-2000;
05-DEC-2000;
06-DEC-2000;
08-DEC-2000;
08-DEC-2000;
08-DEC-2000;
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08-DEC-2000;
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17-NOV-2000;
17-NOV-2000;
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17-NOV-2000;
17-NOV-2000;
(HUMA-) HUMAN GENOME SCI INC
                                72000US-024613P.
72000US-024920P.
72000US-0249210P.
72000US-0249211P.
72000US-0249213P.
72000US-0249214P.
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72000US-024926P.
72000US-024926P.
72000US-025186P.
72000US-0251868P.
72000US-0251869P.
72000US-0251989P.
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ξ Barash SC,

2001-488783/53. AAS26094.

New nucleic acid molecules encoding 461 human secreted proteins for diagnosing, preventing, treating or ameliorating medical conditions as additives or preservatives. and

Claim 11; SEQ ID NO 1060; 980pp; English.

The invention relates to isolated nucleic acid molecules and their encoded secreted proteins. The nucleic acids and proteins are used to prevent, treat or ameliorate a medical condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition. Antibodies to the proteins can also be used in alleviating symptoms associated with the disorders and in diagnostic immunosassays e.g. radioimmunoassays or enzyme linked immunosorbant assays (ELISA). Disorders which are diagnosed or treated include autoimmune diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g.

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RESULT 6
ABU55176
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       capabilities, fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors and other nutritional components. The present sequence represents a novel secreted protein of the invention. Note: sequence data for this patent did not form part of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders e.g. cerebral ischaemia, angiogenesis, nervous system disorders e.g. Alzheimer's disease, infections caused by bacteria, viruses and fungi and ocular disorders e.g. corneal infection, and many other disorders listed in the specification. The polypeptides can also be used to aid wound healing and epithalial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used as a food additive or preservative to increase or decrease storage
                                    07-JUL-2000;
07-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                  muscular disorder; respiratory disease; reproductive disorder; gastrointestinal disorder; pulmonary disorder; cardiovascular disorder;
                                                                      28-JUN-2000;
                                                                                       04-FEB-2000;
                                                                                                         31-JAN-2000;
                                                                                                                                                                                                             US2002132753-A1
                                                                                                                                                                                                                                                                                  haemostatic; antiarteriosclerotic.
                                                                                                                                                                                                                                                                                               cardiovascular; nephrotropic; cytostatic;
                                                                                                                                                                                                                                                                                                            hyperproliferative disorder; inflammatory disease; allergic reaction; blood related disorder; cancer; immunosuppressive; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                       Human
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                                                                                                                                          17-JAN-2001; 2001US-00764864
                                                                                                                                                                                                                                                                                                                                                                                    Human; neural disorder; immune system disorder; renal disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MKYHVM 6
                                                                                                                                                                                                                                                                                                                                                                                                                     novel polypeptide #263.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard;
; 2000US-0179065P.
; 2000US-0180628P.
; 2000US-0214886P.
; 2000US-0216647P.
; 2000US-0216880P.
; 2000US-0217487P.
; 2000US-0217496P.
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02-0CT-2000;
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13-0CT-2000;
20-0CT-2000;
20-0CT-2000;
20-0CT-2000;
17-NOV-2000;
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02-OCT-2000;
02-OCT-2000;
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22-AUG-2000;

30-AUG-2000;

01-SEP-2000;

01-SEP-2000;

01-SEP-2000;

05-SEP-2000;

05-SEP-2000;

05-SEP-2000;

21-SEP-2000;

22-SEP-2000;

22-SEP-2000;

23-SEP-2000;

24-SEP-2000;

25-SEP-2000;

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14-AUG-2000;
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26-JUL-2000;
26-JUL-2000;
New polypeptides and nucleic acids, useful in gene therapy for treating, inhibiting or preventing e.g. neural, immune system, muscular, respiratory, reproductive, gastrointestinal, pulmonary, cardiovascular or renal disorders.
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                                                                                                                   N-PSDB; ABX73435.
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) RUBEN S M
) BARASH S
                                                                                                                                                                                    Ruben SM,
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2000US-0231413P.

2000US-0231413P.

2000US-0231497P.

2000US-0234997P.

2000US-0235834P.

2000US-023637P.

2000US-023636P.

2000US-023636P.

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2000US-023636P.

2000US-0236370P.

2000US-0236370P.

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2000US-0237039P.

2000US-0237039P.
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); 2000US-0220963P.
); 2000US-0220964P.
); 2000US-0224518P.
); 2000US-0224519P.
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; 2000US-0244617P.
; 2000US-0249299P.
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; 2000US-0251869P.
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; 2000US-0229344P.
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; 2000US-0226868P.
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; 2000US-0229287P.
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RESULT 7
ABP69649
ID ABP6
XX ABP6
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XX Huma
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XX Huma
XX Park
XW anti
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and multiple sclerosis), muscular disorders, respiratory diseases (e.g. nasal vestibulitis, nasal polyps and sinusitis), reproductive disorders, gastrointestinal disorders, pulmonary disorders, cardiovascular disorders (e.g. congenital heart defects, Ebstein's anomaly and hypoplastic left heart syndrome), renal disorders (e.g. acute kidney failure and end-stage renal disease), hyperproliferative disorders (e.g. Hodgkin's disease and leukaemia), inflammatory diseases (e.g. septic shock, bursitis and appendicities), allergic reactions and conditions (e.g. asthma), blood related disorders (e.g. thrombosis, atherosclerosis and myocardial infarction) and cancerous diseases. Sequences ABU54914-ABU55699 and
                                                                                                                                                                                                                                                                                               Human; genome mapping; gene therapy; food supplement; virus; fungus; cell-proliferative disorder; neurodegenerative disease; bacterial; Parkinson's disease; Alzheimer's disease; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to human novel polypeptides and their associated polynucleotides. The polypeptides and polynucleotides are useful in gene therapy for treating, inhibiting or preventing neural disorders, immune system disorders (e.g. systemic lupus erythematosus, rheumatoid arthritis
                                                                                                                                                                                                                                                                           multiple sclerosis; diabetes; genetic disorder; wound; burn; infection;
                                                                                                                                                                                                                                                                                                                                                                                   Human polypeptide SEQ ID NO 1696.
                                                                                                                                                                                                                                                                                                                                                                                                                             20-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABP69649 standard; protein; 490 AA.
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                      05-MAR-2002; 2002WO-US005095.
                                                                12-SEP-2002.
                                                                                                          WO200270539-A2
                                                                                                                                                                                              antiarthritic.
                                                                                                                                                                                                             haemostatic; vulnerary; fungicide; antibacterial; virucide; protozoacide;
                                                                                                                                                                                                                               antiparkinsonian; antidiabetic; immunosuppressive; dermatological;
                                                                                                                                                                                                                                                       arthritis; cytostatic; immunomodulator; nootropic; neuroprotective;
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                                                                                                                                                 sapiens.
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Similarity 100.0%;
6; Conservative 0
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%; Pred. No. 23;
0; Mismatches
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RESULT 8
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                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           protein or complementary sequences. The polynucleotides are useful for identifying expressed genes or for physical mapping of human genome. The encoded polypeptides (ABP66902-ABP69949) are useful as molecular weight markers, as a food supplement, for generating antibodies, in medical imaging, screening and diagnostic assays and for treating cell-proliferative disorders (cancer), neurodegenerative diseases (Parkinson's or Alzhaimer's disease), autoimmune diseases (multiple sclerosis, diabetes, lupus) genetic disorders, myeloid or lymphoid disorders, platelet or coagulation disorders, wound, burns, incision, ulcers, liver or lung fibrosis, infections (bacterial, viral, fungal, parasitic), arthritis, etc. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format
   Human; nucleic acid-associated protein; NAAP; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to an isolated polynucleotide (I) comprising a nucleotide sequence selected from any of 948 sequences (ABZ11119-ABZ12086) or their mature protein coding portion, active domain coding
                                     Human nucleic acid-associated protein (NAAP) - SEQ ID No 27.
                                                                        10-APR-2003
                                                                                                                                           AAO16430 standard; protein; 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 9; SEQ ID NO 1696; 1012pp + Sequence Listing; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New polynucleotides comprising sequences assembled from expressed sequence tags (ESTs), useful for treating cell-proliferative, neurodegenerative, autoimmune, genetic, myeloid or lymphoid, or platelet
                                                                                                                                                                                                                                                                                                                                                                               Sequence
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Local Similarity 100.0%;
nes 6; Conservative 0
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                                                                                                                                                                                                                                     MKYHVM 140
                                                                                                                                                                                                                                                                                                                                                                               490 AA;
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                                                                        (first entry
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Ma Y, Yamazaki V, Chen
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Pred. No. 32;
0; Mismatches
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R, Wang Z,
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Z, Ghosh M;
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05-MAR-2001; 2001US-00799451

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Borowsky ML, Y.
Richardson TW,
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06-JUL-2001;
06-JUL-2001;
                                                                                The invention comprises the amino acid and coding sequences of human nucleic acid-associated proteins (NAAP). The DNA and protein sequences of the invention are useful for diagnosing, treating or preventing disorders associated with aberrant expression of NAAP, such as: cell proliferative disorders (e.g. arteriosclerosis, atherosclerosis, cirrhosis, hepatitis or cancer; developmental disorders (e.g. renal tubular acidosis, anaemia or mental retardation); neurological disorders (e.g. Albaimer's disease, Parkinson's disease or epilepsy); and autoimnune/inflammatory disorders (e.g. Alba; allergies, asthma or Crohn's disease). The DNA sequences of the invention are useful for creating transgenic animals to model human disease. The present amino acid sequence represents a human nucleic acid-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gandhi AR,
Arvizu CS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JUN-2001;
29-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New nucleic acid-associated proteins and polynucleotides, useful for diagnosing, treating or preventing cell proliferative (e.g. cancer), neurological (e.g. epilepsy or Parkinson's disease), or autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cell proliferative disorder; atherosclerosis; cirrhosis; hepatitis; AIDS; cancer; developmental disorder; renal tubular acidosis; anaemia; asthma; mental retradation; neurological disorder; Albeimer's disease; epilepsy; Parkinson's disease; autoimmune disorder; inflammatory disorder; allergy;
Sequence 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disorders (e.g. AIDS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB;
                                                           associated protein of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 257-258; 312pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INCY-) INCYTE GENOMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-JUN-2002; 2002WO-US021179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-JAN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2003-201420/19.
DB; AAL51580.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J, Griffin JA, Yang J, San
ML, Yao MG, Walia NK, Band
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; 2001US-030051BP.

2001US-0301797P.

2001US-030192P.

2001US-0301892P.

2001US-0301893P.

2001US-0303442P.

2002US-0303442P.

2002US-0306443BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Swarnakar A, Hafalia AJA, Warren BA, Em
Ison CH, Honchell CD, Lee EA, Yue H, E
Griffin JA, Yang J, Sanjenwala MM, Bau
, Yao MG, Walia NK, Bandman O, Lal PG,
TW, Elliott VS, Luo W, Tang YT, Zebarje
₹
                                                               the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           al PG, Becha SD,
Zebarjadian Y, L
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Query Match 100.0%; Score 34; 멂

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RESULT 9
ADG42180
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                            Query Match 100.0%; Score 34; DB Best Local Similarity 100.0%; Pred. No. 36; Matches 6; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                        Direct cloning and determination of base sequences of DNAs containing a region encoding for proteins from cDNA libraries derived from whole human adult and fetal brains, and human adult hippocampus.
                                                                                          Sequence 534 AA;
                                                                                                                                  and foetal brains and human adult hippocampus. The invention is useful for preparation of recombinant proteins derived from whole human adult not foetal brains and human adult hippocampus. Protein chips prepared from the base sequences are useful for diagnosis of systematic diseases. This sequence represents a human brain/hippocampus polypeptide used in
                                                                                                                                                                                                  The invention relates to cDNA libraries derived from whole human adult and foetal brains and human adult hippocampus. The invention is useful
                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 73; 183pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-460752/44.
                                                                                                                                                                                                                                                                                                                                                                                                                 25-APR-2001; 2001JP-00127066.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; brain; hippocampus; protein chip; adult brain; foetal brain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human brain/hippocampus polypeptide #28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADG42180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADG42180 standard; protein; 534
                                                                                                                                                                                                                                                                                                                                        N-PSDB; ADG42135.
                                                                                                                                                                                                                                                                                                                                                                                                                                               25-APR-2001; 2002JP-00049081.
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                                                                                                                                                                                                                                                                                                                                                                                   (KAZU-) ZH KAZUSA DNA KENKYUSHO
                                                                                                                       scope of the invention.
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   1 MKYHVM 6
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                                                            DB
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                                                          Length 534;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
ADA55339
ID ADA55
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            Query Match 100.0%; Best Local Similarity 100.0%; Matches 6; Conservative 0
                                                                                                                  The present invention relates to novel human secretory or membrane proteins (ADA54072-ADA55710) and their coding sequences (ADA52433-ADA54071). The coding sequences are useful in the gene therapy of diseases caused by abnormalities of the proteins, e.g. cancer,
                                                                                                                                                                                                                           New polynucleotides encoding full-length polypeptides, e.g. secretory and/or membrane proteins, useful for developing medicines for diseases which the gene is involved, or as target molecules for gene therapy.
                                                                         Sequence 567
                                                                                                                                                                                                                                                                                         WPI; 2003-395539/38.
N-PSDB; ADA53700.
                                                                                                                                                                                                                                                                                                                                   Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Is
Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R,
Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytostatic; Anti-inflammatory; Osteopathic; Neuroprotective; Nootropic; Gene Therapy; human; secretory protein; membrane proteins; cancer; inflammatory disease; osteoporosis; neurological disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADA55339;
                                                                                                                                                                                               Claim 14; SEQ ID NO 2907; 205pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                              14-SEP-2001; 2001JP-00328381.
24-JAN-2002; 2002US-0350435P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EP1293569-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human protein, SEQ ID 2907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADA55339 standard; protein; 567 AA.
                                                                                                     inflammatory diseases, osteoporosis or neurological disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-MAR-2002; 2002EP-00006586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                 (HELI-) HELIX RES INST.
(REAS-) RES ASSOC BIOTECHNOLOGY.
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            0; Mismatches 0
            0
                                         Length 567;
              Indels
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            Gaps
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밁 5 1 MKYHVM 6 |||||| 212 MKYHVM 217

Search completed: September 29, 2005, 12:31:11 Job time : 80.6667 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

September 29, 2005, 12:15:33; Search time 20.6667 Seconds (without alignments) 21.672 Million cell updates/sec

Title: Perfect score: US-10-774-147B-31 34

Sequence: 1 MKYHVM 6

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : Issued\_Patents\_AA:\*

1: /cgn2\_6/ptodata/1/iaa/5A\_COMB.pep:\*

2: /cgn2\_6/ptodata/1/iaa/5B\_COMB.pep:\*

3: /cgn2\_6/ptodata/1/iaa/6B\_COMB.pep:\*

4: /cgn2\_6/ptodata/1/iaa/FCTUS\_COMB.pep:\*

5: /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result	Score	Query Match	Query Match Length DB	DB	ID	Description
1	31	91.2	331	4	US-09-344-882-6	Sequence 6, App
2	31	91.2	406	ω	US-09-108-020-4	Sequence 4, Appl
ω	31	91.2	406	ω	US-09-108-020-42	Sequence 42, Ap
4	31	91.2	406	4	US-09-344-882-14	Sequence 14, Ap
ر ن	31	91.2	406	4	US-09-685-296-4	Sequence 4, App
6	31	91.2	406	4	US-09-685-296-42	Sequence 42, Ap
7	30	88.2	212	N	US-08-477-396A-2	Sequence 2, Appli
œ	30	88.2	777	N	US-08-477-396A-4	Sequence 4, App
9	30	88.2	779		US-08-426-627-4	Sequence 4, App
10	30	88.2	779	⊷	US-08-426-627-24	Sequence 24, Ap
=	30	88.2	779	4	US-09-461-912A-39	Sequence 39, Ap

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
26	26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	28	28	28	28	28	28	28	28	29	29	29	29	29	29	30	30	30	30
76.5	76.5	76.5		76.5	6	6	6.	6.	76.5	79.4	79.4	79.4	79.4	79.4	79.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	5.	5	5	85.3	5	85.3	8	88.2		88.2
187	183	153	128	128	128	128	124	73	63	582	582	578	414	411	313	4872	4866	586	466	444	442	254	75	634	527	527	128	128	111	837	836	811	811
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US-09-540-236-3818	US-09-902-540-13343	US-09-732-210-1748	US-09-212-149-4	US-09-212-149-3	US-08-928-926A-4	US-08-928-926A-3	US-09-732-210-1149	US-09-248-796A-26927	US-09-248-796A-23083	US-08-261-086-6	US-08-261-086-4	US-09-690-942-10	US-09-328-352-5504	US-09-690-942-12	US-09-248-796A-18880	US-09-424-783-3	US-09-424-783-2	US-09-270-767-44444	US-09-857-716-18	US-09-248-796A-19173	US-09-857-716-20	US-09-270-767-59881	US-09-513-999C-7121	US-09-385-219A-26	US-09-631-594-55	US-09-103-331-4	US-09-212-149-1	US-08-928-926A-1	US-09-513-999C-4963	US-08-426-627-23	US-08-426-627-6	US-08-426-627-22	US-08-426-627-2
ø	Sequence 13343, A	17,	4	Ψ	Sequence 4, Appli	ω	Sequence 1149, Ap		230	<b>o</b>	4,		e 5504		188	ω				Φ	Φ	e 59881,	e 7121	26,	55	4	<u>, , , , , , , , , , , , , , , , , , , </u>		e 4963	e 23,	e 6, 2	'n	Sequence 2, Appli

Search completed: September 29, 2005, 12:42:01 Job time: 20.6667 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: September 29, 2005, 12:23:19; Search time 76.5 Seconds
(without alignments)
32.558 Million cell updates/sec

Title: US-10-774-147B-31

Sequence: Perfect score: 1 MKYHVM 6

Scoring table: вьоѕим62 Gapop 10.0 , Gapext 0.5

Searched: 1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published\_Applications\_AA:\*

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4: /cgn2\_6/ptcdata/1/pubpaa/US06\_NEW\_PUB.pep:\*

5: /cgn2\_6/ptcdata/1/pubpaa/US06\_PUBCOMB.pep:\*

6: /cgn2\_6/ptcdata/1/pubpaa/US08\_PUBCOMB.pep:\*

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11: /cgn2\_6/ptcdata/1/pubpaa/US09A\_PUBCOMB.pep:\*

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13: /cgn2\_6/ptcdata/1/pubpaa/US10A\_PUBCOMB.pep:\*

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16: /cgn2\_6/ptcdata/1/pubpaa/US10A\_PUBCOMB.pep:\*

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19: /cgn2\_6/ptcdata/1/pubpaa/US10A\_PUBCOMB.pep:\*

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20: /cgn2\_6/ptcdata/1/pubpaa/US1A\_PUBCOMB.pep:\*

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22: /cgn2\_6/ptcdata/1/pubpaa/US1A\_PUBCOMB.pep:\*

22: /cgn2\_6/ptcdata/1/pubpaa/US1A\_PUBCOMB.pep:\*

22: /cgn2\_6/ptcdata/1/pubpaa/US1A\_PUBCOMB.pep:\*

| Cgn2\_6/ptodata/1/pubpaa/USO9A\_PUBCOMB.pep: 
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| Cgn2\_6/ptodata/USO9

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

RESULT 1 US-10-77	300 300 300 300 300 300 300 300 300 300	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Result
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7B-31			
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	192 192 192 192 192 192 172 173 173 175 175 175 175 175 175 175 175 175 175	109 3666 5665 5251 2251 2251 331 331 331 331 331 331 331 331 331 3	% Query Match Length DB
ALI GNMENTS	US-00-764-869-872 US-10-091-504-872 US-10-103-313-547 US-10-227-577-872 US-10-227-577-872 US-10-217-371-6 US-10-855-588-50 US-10-855-588-60 US-10-855-588-46 US-10-855-588-46 US-10-855-588-46 US-10-855-588-46 US-10-855-588-46 US-10-855-588-46 US-10-855-588-46 US-10-855-588-46 US-10-17-371-4 US-10-17-371-10 US-10-938-061-121 US-10-938-061-121 US-10-217-371-10 US-10-217-371-12	US-10-774-147B-31 US-09-764-864-1483 US-09-764-864-1060 US-10-094-749-2907 US-10-425-114-67856 US-10-425-114-67856 US-10-425-114-67856 US-10-425-114-67858 US-10-425-114-9358 US-10-425-115-190117 US-10-425-115-190117 US-10-425-115-190117 US-10-425-115-190117 US-10-425-115-190117 US-10-425-114-54353 US-10-425-114-3707 US-10-425-114-3707 US-10-425-114-3707 US-10-426-599-205060 US-10-087-867-10 US-10-087-867-10 US-10-087-867-18 US-10-087-867-18 US-10-087-8687-19 US-10-087-8687-19 US-10-087-8687-19 US-10-052-6488-79 US-10-052-6488-79 US-10-052-6488-79	SUMMARIES ID
		Sequence 1483, Appl Sequence 1060, Ap Sequence 2907, Ap Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 172422, Sequence 172422, Sequence 190117, Sequence 14534, Sequence 144, Appl Sequence 14, Appl Sequence 14, Appl Sequence 14, Appl Sequence 24533, A Sequence 37072, A Sequence 203066, Sequence 203066, Sequence 2750, Appl Sequence 2750, Appl Sequence 2750, Appl Sequence 2750, Appl Sequence 2359, Appl Sequence 2359, Appl Sequence 2359, Appl Sequence 2359, Appl Sequence 2359, Appl Sequence 79, Appl Sequence 79, Appl Sequence 79, Appl	Description
; SEQ ID NO 1483 ; LENGTH: 109 ; TYPE: PRT ; ORGANISM: Homo sapiens ; FEATURE: ; NAME/KEY: SITE	-09-764-86 -09-764-86 Sequence 1 Sequence 1 Septent No. Septent IN Patent Reperit CANT TITLE OF FILE REPE CURRENT AP CURRENT F CURRENT F SOFTWARE:		<pre>; Sequence 31, Application US/10774147B ; Publication No. USZ0040248255A1 ; GEMERAL INFORMATION: ; APPLICANT: POSTECH Foundation</pre>

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; Sequence 2907, Application US/10094749
; Publication No. US20030219741A1
; GENERAL INFORMATION:
; APPLICANT: ISOGAI, TAKAO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: OTSUKI, TETSUJI
; APPLICANT: WAKAMATSU, AI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: SATO, HIROYUKI
; APPLICANT: STOMO, YUUKO
; APPLICANT: 150NO, YUUKO
; APPLICANT: HIO, YURI
; APPLICANT: HIO, YURI
; APPLICANT: NAGAI, KEIICHI
                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-764-864-1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
US-09-764-864-1060
                                                                                                                                                                                                                                                                                                            US-10-094-749-2907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/764,864

CURRENT FILING DATE: 2001-01-17

Prior application data removed - consult PALM or file wrapper NUMBER of SEQ ID NOS: 1792

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 1060

LENGTH: 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1060, Application US/09764864
Patent No. US20020132753A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PTZ23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 34; DB 9; Length 366; Best Local Similarity 100.0%; Pred. No. 62;
                                                                                                                                                                                                                                                                                                                                                                                               11 MKYHVM 16
                                                                                                                                                                                                                                                                                                                                                                                                                      1 MKYHVM 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 MKYHVM 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MKYHVM 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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0

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APPLICANT: IRIE, RYOTARO

APPLICANT: SEKI, NAOHIKO

APPLICANT: SEKI, NAOHIKO

APPLICANT: SEKI, NAOHIKO

APPLICANT: YOSHIKAWA, TSUTOMU

APPLICANT: YOSHIKAWA, TSUTOMU

APPLICANT: NAGAHARI, KENJI

APPLICANT: NAOHIKO

ITILE OF INVESTION: NOVEL FULL-LENGTH cDNA

FILLE REFERENCE: 084335/0160

CURRENT APPLICATION NUMBER: US/10/094,749

CURRENT APPLICATION NUMBER: US/10/094,749

CURRENT APPLICATION NUMBER: 00/350,435

PRIOR APPLICATION NUMBER: 60/350,435

PRIOR APPLICATION NUMBER: D2001-328381

PRIOR APPLICATION NUMBER: D2001-328381

PRIOR FILING DATE: 2001-09-14

NUMBER OF SEQ ID NOS: 3381

SOCITANAE: Patentin Ver. 2.1

SEQ ID NO 2907

LENGTH: 567

TYPE: PRIT

CORGANISM: Homo sapiens

US-10-094-749-2907

Query Match

Best Local Similarity 100.0%; Score 34; DB 15; Length 567;

Best Local Similarity 100.0%; Pred. No. 94;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps

CY 1 MKYHVM 6

OY 1 MKYHVM 217

Search completed: September 29, 2005, 12:49:48

Job time: 77.5 secs
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0

; LOCATION: (100)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids US-09-764-864-1483

Query Match 100.0%; Score 34; DB 9; Length 109; Best Local Similarity 100.0%; Pred. No. 19; Matches 6; Conservative 0; Mismatches 0; Indels

0;

0

	Run on:
39. WI	September 29, 2005, 12:13:23; Search time 14.5 Second
(without dignments) 39.814 Million cell updates/sec	Search time 14.5 Secon
s/sec	ន

OM protein - protein search, using sw model

Sequence:	Perfect score:	Title:
1 MKYHVM 6	34	US-10-774-147B-31

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR\_79:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

Result No.	Score	Query Match	Query Match Length DB	DB	ID	Description
-	31	91.2	406	2	C86425	probable pyruvate
~	31	91.2	406	N	E84758	probable pyruvate
ω	30	88.2	732	2	T19923	hypothetical prote
4	30	88.2	779	2	S36111	osteoblast-specifi
5	30	88.2	811	N	S36109	osteoblast-specifi
6	30	88.2	836	N	S36110	osteoblast-specifi
7	30	88.2	1174	N	S57060	probable membrane
60	29	85.3	61	2	C70245	hypothetical prote
9	29	85.3	243	2	H70227	antigen, P35 homol
10	29	85.3	319	2	T15463	hypothetical prote
11	29	85.3	332	N	C83933	penicillin-binding
12	29	85.3	451	N	G70241	hypothetical prote
13	29	85.3	491	N	S61715	clathrin-associate

2 S78638 hypothetical prote c62 C62002 probable cell divi 2 B81230 septum site-determ 2 D82659 hypothetical prote 2 H8743 ryanodine receptor 2 T27805 hypothetical prote 2 H82011 prote 2 H82011 prote 2 H82011 prote 2 H82011 prote 3 H82011 prote 4 H82011 prote 4 H82011 prote 5 H82011 prote 5 H82011 prote 5 H82011 prote 6 H82011 prote 6 H82011 prote 7 H82011 prote 8 H82011 prote 7				
S78638 hypothetical B81230 septum site- B81230 septum site- B81230 septum site- B81230 septum site- B81230 rypochietical I48743 rypochetical I48743 rypochetical I482011 probable out A81239 protein F9C1 T25716 probable out A81231 probable out A81231 rypochetical I25715 protein F9C1 T25715 rypochetical T25715 rypochetical T2737 rypochetical F71070 rypochetical F71070 hypothetical F71070 hypothetical F71070 rypochetical		79.4	27	44
S78638 hypothetical B81230 septum site- B81230 septum site- B81230 septum site- D82659 hypothetical I 48743 ryanodine re T27805 hypothetical H82011 probable out A81239 protein F9C1 T25716 hypothetical E84534 hypothetical T25715 ryanodine re B54161 ryanodine re B54161 ryanodine re A97230 hypothetical S77177 ryanodine re A97230 hypothetical F84016 ryanodine re A97230 hypothetical F71070 hypothetical F71070 hypothetical F71070 hypothetical F84016 conserved hy T39456 zinc finger   F71403 hypothetical A39597 hypothetical A39597 phytoene dehy S54134 phytoene dehy A45381 phytoene dehy A45381 phytoene dehy A45381 phytoene dehy	222	79.4	27	: 43
S78638 hypothetical B81230 septum site- B81230 septum site- B81230 hypothetical I48743 ryanodine re- I727805 hypothetical H82011 probable out- A81239 protein F9C1- I25716 hypothetical I64534 protein F9C1- I725715 hypothetical I725715 hypothetical I72572 ryanodine re- B54161 ryanodine re- H84173 ryanodine re- H84173 hypothetical I72772 ryanodine bi- I72772 ryanodine bi- I72773 hypothetical I7300 hypothetical I7301 hypothetical I7302 hypothetical I7303 hypothetical I7304 hypothetical		79.4	27	42
S78638 hypothetical B81230 septum site- B81230 septum site- B81230 septum site- B81230 septum site- B81230 hypothetical I48743 ryanodine re I727805 hypothetical B81231 probable out A81239 protain F9C1 T25716 hypothetical E84534 hypothetical E84534 hypothetical I725715 hypothetical I725715 ryanodine re B54161 ryanodine re B54173 ryanodine re B54161 ryanodine re B54161 ryanodine re B54173 ryanodine re B54173 ryanodine re A97230 hypothetical F71070 hypothetical F71070 hypothetical T23839 hypothetical F71070 ryanodine re A97230 hypothetical F71070 hypothetical F71070 ryanodine re A97230 hypothetical F71070 hypothetical		79.4	27	41
S78638 hypothetical B81230 septum site- D82659 hypothetical I48743 ryanodine re 127805 hypothetical H82011 probable outer membral C96503 protein F901 T25716 hypothetical E84534 hypothetical E84514 hypothetical E84514 hypothetical E84516 ryanodine re B54161 ryanodine re		79.4	27	40
S78638 hypothetical B81230 septum site- B81230 septum site- D82659 hypothetical I 48743 ryanodine re T27805 hypothetical H82011 probable out A81239 protein F9C1 H25716 hypothetical C96503 protein F9C1 T25716 hypothetical C96503 protein F9C1 T25715 hypothetical S74173 ryanodine re B54161 ryanodine re B54161 ryanodine re A97230 hypothetical S77177 ryanodine re A97230 hypothetical F84016 conserved hy T39456 zinc finger F91403 hypothetical F84016 conserved dhy T39456 zinc finger F71403 hypothetical	570	79.4	27	39
S78638 hypothetical B81230 septum siter- B81230 septum siter- D82659 hypothetical I48743 ryanodine re- I727805 hypothetical I482011 probable out- A81239 protein F9C1- I25716 hypothetical I725716 hypothetical I725716 hypothetical I725716 hypothetical I725717 hypothetical I725717 ryanodine re- B54161 ryanodine re- B54173 ryanodine re- B54161 hypothetical I7272 ryanodine re- A97230 hypothetical I731070 hypothetical I73139 hypothetical I73139 hypothetical I73130 hypothetical I731403 hypothetical I73150 ryanodine re- A97230 hypothetical I73160 ryanodine re- A97230 hypothetical I73160 ryanodine re- A97230 hypothetical I73160 ryanodine re- A97230 hypothetical		79.4	27	38
S78638 hypothetical C82002 probable cell B81230 septum site- D82659 hypothetical I48743 ryanodine re 727805 hypothetical H82011 probable outer membrat C96503 protein F901 T25716 hypothetical E84534 hypothetical E84534 hypothetical T25715 ryanodine re B54161 ryanodine re B54173 ryanodine re A97230 hypothetical F71070 hypothetical F713839 hypothetical F84016 ryanodine re A97230 ryanodine re		79.4	27	37
S78638 hypothetical C82002 probable cell B81230 septum site- D82659 hypothetical I 48743 ryanodine re T27805 hypothetical H82011 probable out A81239 protein F9C1 C96503 protein F9C1 T25716 hypothetical T25715 hypothetical T25715 ryanodine re S74173 ryanodine re S74173 ryanodine re S74272 ryanodine re A97230 hypothetical S74173 ryanodine re A97230 hypothetical F71070 hypothetical		79.4	27	36
S78638 hypothetical B81230 septum siter- D82659 hypothetical I48743 ryanodine ree T27805 hypothetical H82011 probable out A81239 protein FOI- T25716 hypothetical T25716 hypothetical T25716 hypothetical T25717 hypothetical T25717 ryanodine ree B54161 ryanodine ree B54173 ryanodine ree B54173 ryanodine ree B54173 ryanodine ree B54173 ryanodine ree B54161 hypothetical T25727 ryanodine ree A97230 hypothetical T25839 hypothetical		79.4	27	35
S78638 hypothetical C82002 probable cell B81230 septum site- D82659 hypothetical I48743 ryanodine re 727805 hypothetical H82011 probable outer membrat C96503 protein F901 T25716 hypothetical T25715 hypothetical T25715 ryanodine re B54161 ryanodine re B54173 ryanodine re B54173 ryanodine re B54171 ryanodine re B54173 ryanodine re B54173 ryanodine re B54173 ryanodine re B54173 hypothetical T25735 hypothetical T25736 hypothetical T25737 ryanodine re B54161 ryanodine re B54161 ryanodine re B54173 ryanodine re B54173 hypothetical		79.4	27	34
S78638 hypothetical C82002 probable cel. B81230 septum site- B81230 hypothetical I 48743 ryanodine re T27805 hypothetical H82011 probable outh A81239 protein F9C1 T25716 hypothetical T25715 hypothetical T25715 hypothetical T25715 ryanodine re S74173 ryanodine re S74173 ryanodine re S74173 ryanodine re S74173 hypothetical S74173 ryanodine re S74173 ryanodine re S74173 ryanodine re S74173 hypothetical	148	79.4	27	33
S78638 hypothetical C82002 probable cell B81230 septum siter- D82659 hypothetical I48743 ryanodine re- T27805 hypothetical H82011 probable out- A81239 protein FQCI- T25716 hypothetical T25716 hypothetical T25716 hypothetical T25717 ryanodine re- B54161 ryanodine re- Tyanodine re- A97230 hypothetical		79.4	27	32
S78638 hypothetical C82002 probable cell B81230 septum site- D82659 hypothetical I48743 ryanodine re 727805 hypothetical H82011 probable outer membral C96503 protein F901 T25716 hypothetical F84534 hypothetical E84534 hypothetical F874173 ryanodine re B54161 ryanodine re B54161 ryanodine re	92	79.4	27	31
\$78638 hypothetical C82002 probable cel. B81230 septum siter- D82659 hypothetical 148743 ryanodine re- T27805 hypothetical H82011 probable out- R81239 protein F901 T25716 hypothetical T25715 hypothetical T25715 hypothetical T25715 ryanodine re- S74173 ryanodine re- B54161 ryanodine re-	4872	.4	28	30
S78638 hypothetical C82002 probable cel. B81230 septum site- D82659 hypothetical I48743 ryanodine re T27805 hypothetical H82011 probable out A81239 protein F9C1 C96503 protein F9C1 T25716 hypothetical L84534 hypothetical E84534 hypothetical T25715 hypothetical T25716 ryanodine re		82.4	28	29
S78638 hypothetical C82002 probable cel B81230 septum site- D82659 hypothetical I48743 ryanodine re T27805 hypothetical H82011 probable out A81239 protein F901 C96503 protein F901 T25716 hypothetical E84534 hypothetical E84534 hypothetical	4859	4	28	28
\$78638 \$20002 \$81230 \$128659 \$148743 \$127805 \$127805 \$182011 \$182011 \$18239 \$125716 \$184534		.4	28	27
\$78638 C82002 B81230 D82659 I 48743 T27805 H82011 A81239 C96503 T25716		82.4	28	26
\$78638 C82002 B81230 D82659 I 48743 T27805 H82011 A81239 C96503	868	82.4	28	25
\$78638 C82002 B81230 D82659 I 48743 727805 H82011		82.4	28	24
\$78638 C820002 B81230 D82659 148743 T27805		82.4	28	23
\$78638 C82002 B81230 D82659 148743 127805		82.4	28	22
\$78638 C82002 B81230 D82659 I 48743	377	82.4	28	21
\$78638 CB2002 B81230 D82659		82.4	28	20
S78638 C82002 B81230		82.4	28	19
S78638 hypothetical C82002 probable cell		82.4	28	18
S78638 hypothetical		82.4	28	17
	96	•	28	16
AC0116 probable vir	110	س	29	15
2 T25421 hypothetical prote	7	٠	29	14

Search completed: September 29, 2005, 12:39:51 Job time : 15.5 secs

OM protein - protein search, using sw model

Run on: September 29, 2005, 12:11:58; Search time 70 Seconds (Without alignments)
43.893 Million cell updates/sec

Title:
Perfect score:
Sequence: US-10-774-147B-31

1 MKYHVM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : UniProt\_03:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

15	14	13	12	11	10	9	89	7	6	5	4	ω	2	1	No.	
31	31	31	31	31	31	31	31	31	34	34	34	34	34	34	Score	
91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	100.0	100.0	100.0	100.0	100.0	100.0	Match	gs
1033	635	457	406	406	406	406	287	286	591	567	565	562	490	204	Query Match Length	
8	N	N	2	2	N	N	N	N	N		N	N	N	N	BB	
262964	Q82U81	Q8VYS9	Q9C6Z3	Q8LAI3	064688	024458	065087	Q9FKH7	Q69Z99	Z512_HUMAN	Q95JV5	Q8BJF3	Q86XK6	Q6AXW7	ID	
Q6q964 oryctolagus	Q82u81 nitrosomona	Q8vys9 arabidopsis	Q9c6z3 arabidopsis	Q81ai3 arabidopsis	064688 arabidopsis	024458 arabidopsis	065087 picea maria	Q9fkh7 arabidopsis	Q69z99 mus musculu	Q96me7 homo sapien	Q95jv5 macaca fasc	Q8bjf3 mus musculu	Q86xk6 homo sapien	Q6axw7 rattus norv	Description	

5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16 .
29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31
85.3	85.3	85.3	85.3	•	85.3	85.3		85.3	•	•	•	88.2	•	88.2		88.2			88.2	•	88.2		•	88.2	•	88.2	88.2	91.2	91.2
332	317	289	243	177	162	127	120	115	104	61	1869	1174	936	838	836	810	732	428	428	428	217	215	188	188	137	98	58	cυ.	1094
N	N	N	N		N	-	N	N	N	N	N	1	2	1	-	N	2	2	N	N	N	2	N	-	8	8	2	N	
Q9KAMO	Q7N3M4	Q17846	050725	YP98_CAEEL	Q881N8	NB7M_HUMAN	Q7Y4N7	Q7PSJ5	Q6BN60	050758	Q6LF66	YJ11_YEAST	Q6BH21	POSN_MOUSE	POSN_HUMAN	Q6GUA3	Q27480	Q7CF94	Q9A0F6	Q8P1I1	Q6L2U9	Q8HZM3	Q8VE01	DUS I_HUMAN	Q8BWD7	Q6PKZ1	Q7P892	Q9U573	ATHL_RABIT
Q9kam0 bacillus ha	Q7n3m4 photorhabdu	Q17846 caenorhabdi	050725 borrelia bu		Q881n8 pseudomonas	095139 homo sapien	bacterioph	Q7psj5 anopheles g	Q6bn60 debaryomyce	050758 borrelia bu		P47108 saccharomyc	Q6bh21 debaryomyce	Q62009 mus musculu	Q15063 homo sapien			Q7cf94 streptococc		Q8plil streptococc	Q612u9 picrophilus	Q8hzm3 bos taurus	Q8ve01 m dual spec	Q8nej0 homo sapien	Q8bwd7 m mus muscu	Q6pkzl oryctolagus	Q7p892 fusobacteri	Q9u573 dictyosteli	Q9tv52 oryctolagus

# ALI GUMENTS

R.A	RΑ	RA	RA	R.A	RΑ	RX	RC	RΡ	RN	ò	გ	8	So	ÐE	ď	DT	DŢ	ÃC	Ū	Q6AXW7	RESU
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,	Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,	Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,	Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,	Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,	Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,	PubMed=12477932; DOI=10.1073/pnas.242603899;	TISSUE=Testis;	SEQUENCE FROM N.A.	Ē	NCBI_TaxID=10116;	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Rattus norvegicus (Rat).	Hypothetical protein.	25-OCT-2004 (TrEMBLrel. 28, Last annotation update)	25-OCT-2004 (TrEMBLrel. 28, Last sequence update)	25-OCT-2004 (TrEMBirel: 28, Created)	Q6AXW7;	Q6AXW7 PRELIMINARY; PRT; 204 AA.	W7	RESULT 1

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RESULT 2
Q86XK6
ID Q86XX
AC Q86XX
DT Q1----
DT Q1----
DT Q1----
DT Q1----
DE ZNF5
OS Homo
OC Euka
OC Euka
OC NCG1:
RN [1]
RN [1]
RN [1]
RN [1]
RN [1]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 34; DB 2; Length 204; Best Local Similarity 100.0%; Pred. No. 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                Q86XK6;
01-JUN-2003 (TrEMBLrel. 24,
01-JUN-2003 (TrEMBLrel. 24,
01-OCT-2003 (TrEMBLrel. 25,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; BC079285; AAH79285.1; -.
GO; GO:0006138; F:protein tyrosine/serine/threonine phosphata. ..; IEA.
GO; GO:0006470; F:protein mino acid dephosphorylation; IEA.
InterPro; IPR000340; DS_phosphatase.
InterPro; IPR000387; TYR_phosphatase.
Pfam; PF00782; DSPc; 1.
SMART; SM00195; DSPc; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarathe P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Sanchez A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Whiting M., Madan A., Young A.C., Sheychenko Y., Bouffard G.G.,
TISSUE=Testis;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                             ZNF512 protein.
                                                                                                                                                                                                                                                                   Q86XK6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; PS00383; TYR_PHOSPHATASE_1; 1.
PROSITE; PS50054; TYR_PHOSPHATASE_2; 1.
PROSITE; PS50054; TYR_PHOSPHATASE_DUAL; 1.
Hydrolase; Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (AUG-2004) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Director MGC Project;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
                                         SEQUENCE FROM N.A.
                                                                                                                                          Homo sapiens (Human).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and mouse cDNA sequences.";
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                                                                                                    Primates; Catarrhini; Hominidae; Homo.
                                                                                                                   Chordata; Craniata; Vertebrata; Euteleostomi;
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Last annotation update)
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RESULT 3
Q8BJF3
ID Q8B,
AC Q8B
DT 01-
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RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.J., Wang J., Hsiah F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.J., Wang J., Hsiah F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Kichards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Villalon D.K., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Holakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
RA Jones S.J., Marya M. A.
RA Jones S.J., Marya M. A.
RA Jones S.J., Marya M. A.
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Best Local
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                                                 QBBJF3;
QBBJF3;
QBBJF3;
QBBJF3;
Q1-MAR-2003 (TrEMBLrel. 23, Last sequence update)
Q1-MAR-2003 (TrEMBLrel. 25, Last sequence update)
Q1-CCT-2003 (TrEMBLrel. 25, Last annotation update)
Q1-CCT-2003 (TrEMBLrel. 25, Last annotation update)
Mus musculus 12 days embryo eyeball cDNA, RIKEN full-length enriched
Albrary, clone:D230008H22 product:hypothetical Zinc finger, CZH2 type
containing protein, full insert sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam; PF00096; zf-C2H2; 3.

SMART; SM00355; ZNE CZH2; 5

PROSITE; PS00028; ZINC_FINGER_C2H2_1; PS0115; PS0157; ZINC_FINGER_C2H2_2; SEQUENCE 490 AA; 56362 MM; E422ZAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; BC042221; AAH43221.1; -.
60; GC:0005634; C:nucleus; IEA.
60; GC:0003676; F:nucleic acid binding; IEA.
60; GC:0008270; F:zinc ion binding; IEA.
InterPro; IPR007087; Znf_CZH2.
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Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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Mus musculus

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MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600; Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P., Konno H., Akiyama J., Nishi K., Kiteunai T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishino T., Harada A., Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K., Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.; "RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M., Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.:
"Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes.";
Genome Res. 10:1617-1630(2000).
Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P., Fukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W., Hayashida K., Hayatsu N., Hiramoto K., Hiraka T., Hirozane T., Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T., Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S., Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M.,
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the RIKEN Genome Exploration Research Group Phase I & II Team;
thanking Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";
60,770 full-length cDNAs.";
Nature 420:563-573(2002).
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MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=C57BL/6J; TISSUE=Eyeball; MEDLINE=20499374; PubMed=11042159; DOI=10.1101/gr.145100;
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MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                      STRAIN=C57BL/6J; TISSUE=Eyeball;
                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                   Genome Res. 10:1757-1771(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=C57BL/6J;
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Rodentia;
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GO; GO:0003676; F:nucleic acid binding; IEA.
GO; GO:0008270; F:zinc ion binding; IEA.
InterPro; IPR007087; Znf_C2H2.
Pfam; PF00096; zf-C2H2; 2.
SMART; SM00355; Znf_C2H2; 5.
PROSITE; PS00028; ZINC_FINGER_C2H2_1; 3.
PROSITE; PS0157; ZINC_FINGER_C2H2_2; 2.
Hypothatical protein.
                                                               Osada N., Hida M., Kusuda J., Tanuma R., Hirata M., Suto Y., Hirai M., Terao K., Sugano S., Hashimoto K.;
"Cymomolgus monkey testicular cDNAs for discovery of novel human genes in the human genome sequence.";
BMC Genomics 3:36-36(2002).
EMBL; AB070073; BAB63018.1; -.
GO; GO:0003676; F:nucleus; IEA.
GO; GO:0003676; F:nucleus iEA.
GO; GO:0003676; F:zinc ion binding; IEA.
                                                                                                                                                                                                                                                                                                                                                                     Q95JV5;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q95JV5
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EMBL; AKO81205; BAG39137.1; -.
                                                                                                                                                                                                                                                                                                         Hypothetical protein.

Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                Pfam; PF00096; zf-C2H2; 3. SMART; SM00355; ZnF_C2H2; 4.
                                                                                                                                                                                                                                                                         Cercopithecinae;
NCBI_TaxID=9541;
                                                                                                                                                                                                                             TISSUE=Testis;
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PROSITE; PS00028; ZINC_FINGER_C2H2_1; 3.
                                                    InterPro; IPR007087; Znf_C2H2.
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RA Wakamatsu A., Hayashi K., Sato H., Nagal K., Kimura K., Makita H.,
Ra Makamatsu A., Hayashi M., Niahi T., Shibahara T., Tanaka T., Ishii S.,
RA Yamamoto J.-I., Saito K., Kawai Y., Isono Y., Nakamura Y.,
RA Yamamoto J.-I., Saito K., Kawai Y., Isono Y., Nakamura Y.,
RA Yamamoto J.-I., Saito K., Kawai Y., Isono Y., Nakamura Y.,
RA Sugawara M., Takahashi M., Kanda K., Yokoi T., Furuya T., Kikawa E.,
Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M.,
RA Sugawara M., Takahashi M., Kimata M., Watanabe M., Hiraoka S., Chiba Y.,
RA Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K.,
RA Fujimori K., Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y.,
RA Kusano J., Kanehori K., Takahashi-Fujii A., Hara H., Tanase T.-O.,
Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M.,
RA Momura Y., Matsunawa H., Ichihara T., Shiohata N., Sano S.,
RA Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S.,
RA Yoshikawa S., Senoh A., Mizoguchi S., Terashima Y., Suzuki O.,
RA Moriya S., Momiyama H., Satoh N., Takami S., Terashima Y., Suzuki O.,
RA Hishiqaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B.,
Yamazaki M., Watanabe K., Kunagai A., Itakura S., Fukuzumi Y.,
Yamazaki M., Watanabe K., Kunagai A., Itakura S., Fukuzumi Y.,
RA Pujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T.,
RA Pujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T.,
RA Antsushima-Sugano J., Satoh T., Shirai Y., Takashi Y., Okamoto S.,
RA Makai K., Yagase T., Nomura N., Kikuchi H., Masaho Y., Yamashita R.,
RA Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.;
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29-MAR-2004 (Rel. 43, Last sequence update)
05-UL-2004 (Rel. 44, Last annotation update)
Zinc finger protein 512.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PubMed=14702039; DOI=10.1038/ng1285;
Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=ZNF512; Synonyms=KIAA1805;
Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q96ME7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2512_HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MKYHVM 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 34; DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64495 MW; 5C346681D1BE038D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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RESULT
Q69Z99
ID Q6
AC Q6
DT 25
DT 25
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                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZN_FING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nagase T., Nakayama M., Nakajima D., Kikuno R., Ohara O.;
"Prediction of the coding sequences of unidentified human genes. XX
The complete sequences of 100 new cDNA clones from brain which code
25-OCT-2004 (TrEMBLrel. 25-OCT-2004 (TrEMBLrel.
                                                          269299;
                                                                                     Q69Z99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genew; HGNC:29380; ZNF512.
InterPro; IPR007087; Znf_C2H2.
Pfam; PF00096; zf-C2H2; 4.
SMART; SM00355; Znf_C2H2; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -I- FUNCTION: May be involved in transcriptional regulation.
-I- SUBCELLULAR LOCATION: Nuclear (Potential).
-I- SIMILARITY: Belongs to the krueppel CZHZ-type zinc-finger protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Complete sequencing and characterization of 21,243 full-length human cDNAs.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Transcription regulation;
ZN FING 197 220
ZN FING 287 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00028; ZINC_FINGER_C2H2_1; 3.
PROSITE; PS50157; ZINC_FINGER_C2H2_2; 2.
DNA-binding; Metal-binding; Nuclear protein; Repeat;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AK057028; BAB71348.1; -. EMBL; AB058708; BAB47434.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SIMILARITY: Contains 4 C2H2-type zinc fingers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for large proteins in vitro."; DNA Res. 8:85-95(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=21245130; PubMed=11347906;
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                                                                                                                                               Q
                                                                                                                                                                                                                                 212 MKYHVM 217
                                                                                                                                                                                                                                                                                        1 MKYHVM 6
                                                                                                                                                                                                                                                                                                                                                  6; Conserve
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440
                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64613 MW;
28, Created)
28, Last seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zinc-finger.
                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C2H2-type 3 (atypical).
C2H2-type 4.
                                                                                                                                                                                                                                                                                                                                                                           Score 34; DB
Pred. No. 56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C2H2-type 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C2H2-type 1.
                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       42D84C6BFED46E75 CRC64;
                                                                                     591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        There are no restrictions on
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Last sequence update)

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DT 25-OCT-2004 (TrEMBLrel. 28, Last annotation update)

E MLAA1805 protein (Fragment).

GN Name=mKIAA1805;

OS Mus musculus (Mouse).

C ELWaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

OX NCDI_TaxID=10090;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=Embryonic intestinal tract;

RA Okazaki N., Kikuno R.F., Ohara R., Inamoto S., Koseki H., Hiraoka S.,

Saga Y., Seino S., Nishimura M., Kaisho T., Hoshino K., Kitamura H.,

RA Nagase T., Ohara O., Koga H.;

RA Nagase T., Ohara O., Koga H.;

RY "Prediction of the Coding Sequences of Mouse Homologues of KIAA Gene:

RT "Prediction of the Coding Sequences of Mouse Homologues of KIAA Gene:

RT RANCHAR S., 11:205-218(2004).

RT RANCHAR S., 11:205-218(2004).

DR RANCHAR S., 11:205-218(20
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Search completed: September 29, 2005, 12:38:17 Job time : 70 secs

4

OM protein - protein search, using sw model

September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Title: Perfect score: US-10-774-147B-32

Scoring table: Sequence: 1 МКҰҰКМ 6

Searched: BLOSUM62 Gapop 10.0 , Gapext 0.5 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

A\_Geneseq\_16Dec04:\*
1: geneseqp1980s:\*
2: geneseqp1990s:\*
3: geneseqp2001s:\*
5: geneseqp2001s:\*
6: geneseqp2003as:\*
7: geneseqp2003bs:\*
8: geneseqp2003bs:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

### SUMMARIES

Result	Score	Query Match	Query Match Length DB ID	DB	ID	Description
ב	1 34	100.0	6 8	ω	ADR44751	Adr44751 Human leu
2	31	91.2		œ	ADN17340	Adn17340 V. faba e
ω	30	88.2	1245	ω	AAB18244	Aab18244 Plasmodiu
4	30	88.2		4	ABB60448	Abb60448 Drosophil
G	29	85.3	6	œ	ADR44739	Adr44739 Human leu
6	29	85.3	6	æ	ADR44745	
7	29	85.3	0	8	ADR44749	Adr44749 Human leu
в	29	85.3	45	N	AAY14039	Aay14039 Repeat se
9	29	85.3	46	6	ABR83863	

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
82.4	82.4	82.4	•		82.4		82.4		82.4	82.4		82.4		85.3	85.3	85.3	Ġ	•	•	•	5	•	•	85.3	٠	çs	5	5	85.3	5	5	5	ÿ		
390	390	390	390	390	379	372	371	359	328	314	110	70	6	2295	1228	981	844	844	584	469	432	401	398	397	397	397	397	397	397	397	397	361	220	80	46
7	7	7	7	7	æ	σ	œ	æ	æ	տ	ယ	œ	æ	ω	0	æ	æ	æ	æ	æ	~	G	σ	æ	4	4	ω	ω	N	N	~	æ	2	ű	7
ADJ68663	ADD44983	ADD44987	ADD44985	ADD44981	ABM8 4449	ABUS 4644	ABM84450	ADL90227	ABM84451	ABB47431	AAB44118	ADL04940	ADR44752	AAB18180	ABU43845	ADK5 21 1 4	ADI40973	ADI41017	ADS24442	ADP99149	AAY08219	ABB93450	ABU23701	ADP49177	AAE01139	AAE01140	AAB29598	AAB29597	AAY06512	AAW76437	AAW04217	ADK1 6799	AAY31800	ADH32511	ADF69890
Adj68663 Human hea	Add44983 Human Pro	_	Add44985 Rat Prote	Add44981 Rat Prote				Ad190227 Human enz	Abm84451 Human dia		Aab44118 Human can	Adl04940 M. catarr	Adr44752 Human leu	Aab18180 Plasmodiu		Adk52114 Human ato		1017				3450 Herbicic	Abu23701 Protein e	Human	Huma		Rat P2	Human		_	Aaw04217 Rat dorsa		Aay31800 Beak and	Adh32511 Yeast smO	Adf69890 AcmA-type

### ALI CHMENTS

So	×	₹	W.	W	Š	×	DE	×	ŊΤ	×	AC	×	ID	ADR	RES
Homo sapiens.		leukocyte stimulating peptide; human.	acquired immune deficiency syndrome; AIDS; canc	immune response; pathogen; infectious disease;	Arachidonic acid release; AA release; intracell		Human leukocyte stimulating peptide, P21.		04-NOV-2004 (first entry)		ADR44751;		ADR44751 standard; peptide; 6 AA.	ADR44751	RESULT 1

immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

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                                                               Query Match
Best Local S:
Matches 6
                                                                                                                                                                         diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                        New leukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune
                                                                                                                                Sequence 6 AA;
                                                                                                                                                                                                                             neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious
                                                                                                                                                                                                                                                           The present invention relates to a target cell stimulating peptide where the target cell may be a loukceyte or a phagocyte. The invention is useful for stimulating archidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human
                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 32; 57pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ryu S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-FEB-2003; 2003US-0455621P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-FEB-2004; 2004WO-KR000225.
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Modified-site
                                                                                                                                                                                                                                                                                                                                                                              response to bacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-604410/58.
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                                                                                                                                                                 invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (POSC-) POSCO.
(POST-) POSTECH FOUND.
                                                             y Match 100.0%; Score 34; DB 8; Length 6;
Local Similarity 100.0%; Pred. No. 1.8e+06;
hes 6; Conservative 0; Mismatches 0; Indels
                 1 MKYYKM 6
1 MKYYKM 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
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Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                        BLOSUM62
Gapop 10.0 , Gapext 0.5
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34
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        6 5 4 5 5 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 МКҮҮКМ 6
                                                                                                                         Issued_Patents_AA:*
                                                                                                                                                                 Listing first 45 summaries
/cgn2_6/ptodata/1/iaa/5A_COMB.pep: 

/cgn2_6/ptodata/1/iaa/5B_COMB.pep: 

/cgn2_6/ptodata/1/iaa/6A_COMB.pep: 

/cgn2_6/ptodata/1/iaa/6B_COMB.pep: 

/cgn2_6/ptodata/1/iaa/BTUS_COMB.pep: 

/cgn2_6/ptodata/1/iaa/backfiles1.pep: 
                                                                                                                                                                                                                                                                                                            513545
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Query Match Length DB	œ	ID	Description
1	29	85.3	202	- :	US-08-155-171B-21	Sequence 21, Ap
2	29	85.3	202	N	US-08-435-998-21	Sequence 21, Apr
ω	29	85.3	220	ω	US-09-267-177-8	Sequence 8, Appli
4	29	85.3	397	N	US-08-750-134A-9	Sequence 9, App
G	29	85.3	397	ω	US-09-363-745-9	Sequence 9, App
6	29	85.3	397	ω	US-09-191-136-16	Sequence 16, App
7	29	85.3	397	ω	US-09-191-136-17	Sequence 17, App
80	29	85.3	397	4	US-09-949-016-6237	Sequence 6237, Ap
9	28	82.4	70	4	US-09-540-236-2626	Sequence 2626, Ar
10	28	82.4	378	4	US-09-248-796A-15294	1529
11	28	82.4	390	u	115-09-108-000-36	Secripore 36 April

Search completed: September 29, 2005, 12:31:12 Job time : 81.6667 secs

45 26	44 21					40 20							33 27				29 27	28 27							21 27			18 2		16 28	15 28	14 28	13 28	
		1 ?	1	76.			6 76.5	7	7 79.4	7 79.4	7 79.4	7 79.4	7	7 79.4			7 79.4			7 79.4				7 79.4	7 79.4		7 79.4	7	æ	æ	œ	8 82.4	8 82.4	
116	0	0 0	י ס	9		φ	8 5		3959 2	7	2987 2		229 '	158 ;	156 4	156 3	156 ;	156 3		127 ′	93 4	93 4	80 4	80 4	80 4	80 4	80 4	78 '	582 '	414 4	397 ′	390 '	390 '	
US-09-248-796A-17095	US-U9-313-999C-7831	115-00-513 DOOG 763			US-09-135-166-41	US-08-433-522A-41	PCT-US95-02140-1	-		-		US-09-501-115-4	US-09-248-796A-19846	US-09-091-725-25	US-09-665-479A-10	US-09-357-746-7	US-09-051-969A-4	US-09-051-969A-3	US-09-070-060-7	US-09-270-767-42359	US-09-732-210-340	US-09-732-210-339	US-09-854-133-32	US-09-732-210-353	US-09-732-210-344	US-09-732-210-342	US-09-370-838-32	US-09-732-210-351	US-09-902-540-11161	US-09-901-151-4	US-09-901-151-2	US-09-685-296-36	- 1	
Sequence 17095, A	sequence /bsi, Ap	1170	3 .	41	41,	41	Sequence 1, Appli	Sequence 30, Appl	Sequence 30, Appl	29,	29,	Sequence 4, Appli	198	25,	10,	7,	4,	ω	-	42359	340,	339,	32, 1	353,	344,	342,	32, 1	Sequence 351, App	11:	4,	2, 1	36,	6	

Search completed: September 29, 2005, 12:42:02 Job time : 21.6667 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Sequence: Perfect score: Title: US-10-774-147B-32 34 1 MKYYKM 6

BLOSUM62

Scoring table: Gapop 10.0 , Gapext 0.5

1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Published Applications AA:

(cgn2\_6/prodata/1/pubpaa/USO7\_pUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO6\_NEW\_PUB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO6\_NEW\_PUB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO6\_NEW\_PUB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO6\_NEW\_PUB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO6\_NEW\_PUB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO8\_NEW\_PUB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO8\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO0\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO0\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO0\_PUBCOMB.pep:\*

(cgn2\_6/prodata/1/pubpaa/USO0\_NEW\_PUB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result

Query Score Match Length DB ID

Description

Sequence	9 US-10-611-945-4	414	82.4	28 8	A 4
,	US-10-611-945	1 6		) A	
Sequence	9-901-151-2	397		28	2 2
Sequence	US-10-972-	390	2	28	41
Sequence	US-10-972-	390	82.4	28	40
Sequence	US-10-723-	390	82.4	28	39
Sequence	16 US-10-408-765A-469	390	82.4	28	38
Sequence	US-10-611-	390	N	28	37
Sequence	5 US-10-611-945	390	2	28	36
Sequence	-eo-sn	390	82.4	28	35
Sequence	9-901-151	390	82.4	28	34
Sequence	18 US-10-972-963-70	388		28	33
Sequence	US-10-114-	372	82.4	28	32
Sequence	16 US-10-437-963-173743	319		28	31
Sequence	7 US-	111	82.4		30
Sequence	_	110		28	29
Sequence	10-774-147B-33	a	•	28	28
Sequence	US-10-732-923-15035	1979		29	27
Sequence	<del>-</del> 1	1573	•	29	26
Sequence	-SD	1228	85.3	29	25
Sequence	US-10	849	•	29	24
	15 US-10-436-715-77	844	•	29	23
	15 US-10-436-715-33	844	85.3		22
	US-10-437-963-179	737	•	29	21
	US-10-	713	•		20
	-01-sn	584	•		19
Sequence	US-10-703-	415		29	18
Sequence	-10-424-599-2436	414	•	29	17
Sequenc	US-10	398	•		16
Sequenc	US-10-8	397	•	29	15
Sequence	7 US-10-732-923-227	349	•		14
Sequenc	7 US-10	349		29	13
Sequence	US-10-732-923-842	206	•	29	12
	-10	205	•		11
Sequenc	US-10-083	80	5	29	10
Sequence	US-10-	46	•		g
Sequenc	US-10-321	46	5		œ
Sequenc	US-10-654	45	5.		7
Sequenc	us-10-	0	85.3		O
Sequenc	US-10-774-147B-	σ	٠		G
Sequenc	US-10-774-	σ	•		4
Sequenc	US-11-097-143-8136	2435	ъ		ω
Sequenc	-10-425-115-23	75	91.2	<u>3</u>	2
L	+4 00 +0 -11 +110 00				

**ALIGNMENTS** 

RESULT 1 US-10-774-147B-32

```
Sequence 32, Application US/10774147B

Publication No. US20040248255A1

GERRAL INFORMATION:

APPLICANT: POSTECH Foundation
APPLICANT: POSTECH Foundation
APPLICANT: POSCO

APPLICANT: PASCO

APPLICANT: BAE, Yos-Sik
APPLICANT: SUH, Pann-Ghill

ITILE OF INVENTION: LEUNCOYTE STIMULATING PEPTIDES

FILE REFERENCE: 10050-03USA

CURRENT FILING DATE: 2004-02-05

PRIOR APPLICATION NUMBER: US 60/445,621

PRIOR FILING DATE: 2003-02-07

NUMBER OF SEQ ID NOS: 36

SOFTWARE: Patentin version 3.3

SEQ ID NO 32

ILNGTH: 6

TYPE: PRI
ORGANISM: Artificial sequence
FEATURE:
FEATURE:
ORGANISM: Artificial sequence
FEATURE:
INFORMATION: Synthetic
FEATURE:
INFORMATION: P21

US-10-774-147B-32

Query Macch
Best Local Similarity 100.0%; Score 34; DB 16; Length 6;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps

ON 1 MKYYRM 6

Search completed: September 29, 2005, 12:49:48

Job time: 76.5 secs
```

0;

OM protein - protein search, using sw model

Run on: September 29, 2005, 12:13:23; Search time 14.5 Seconds (without alignments)
39.814 Million cell updates/sec

Title: Perfect score: Sequence: US-10-774-147B-32

1 МКҮҮКМ 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

283416 seqs, 96216763 residues 283416

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR\_79:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

		æ				
No.	Score	Match	Match Length DB		ID	Description
1	31	91.2	515	N	B90324	hypothetical prote
N	31	91.2	5825	N	T12117	polyprotein - fava
ω	30	88.2	579	2	н88632	protein F56B3.7 [i
4	30	88.2	969	2	S17909	hypothetical prote
IJ	30	88.2	1197	2	S26947	DNA-directed DNA p
6	30	88.2	1245	N	D71613	GAF domain protein
7	29	85.3	133	N	в97270	CBS domain contain
8	29	85.3	201	2	T28272	ORF MSV111 hypothe
9	29	85.3	202	N	S11434	proteinase - bovin
10	29	85.3	240	N	н69932	hypothetical prote
11	29	85.3	391	N	G90253	formate hydrogenly
12	29	85.3	397	N	S60334	purinoceptor P2X -
13	29	85.3	397	N	158099	gene P2X3 protein

Search completed: September 29, 2005, 12:39:51 Job time : 14.5 secs

OM protein - protein search, using sw model

September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments) 43.893 Million cell updates/sec

Title:
Perfect score:
Sequence: US-10-774-147B-32 34 1 МКҮҮКМ 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : UniProt\_03:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result	Score	% Query Match	% Query Match Length DB	DB	ID	Description
_	34	100.0	72	2	Q6EB84	Q6eb84 campylobact
N	31	91.2	37	N	Q8KYT5	Q8kyt5 bacillus an
ω	31	91.2	37	2	Q6F013	Q6f013 bacillus an
4	31	91.2	37	2	Q74NW2	Q74nw2 bacillus ce
5	31	91.2	129	N	Q7Y3Q4	
σ	31	91.2	170	N	Q7RC52	10
7	31	91.2	377	ν	Q6FKN1	Q6fkn1 candida gla
æ	31	91.2	515	2	Q97XS3	Q97xs3 sulfolobus
9	31	91.2	5825	N	082731	082731 vicia faba
10	30	88.2	42	N	Q8HEI5	Q8hei5 varroa dest
11	30	88.2	127	N	Q9LW79	_
12	30	88.2	180	N	Q832U8	Q832u8 enterococcu
13	30	88.2	391	N	Q7VQQ2	Q7vqq2 candidatus
14	30	88.2	465	N	Q6GUC6	Q6guc6 edwardsiell
15	30	88.2	541	N	045109	045109 caenorhabdi

	OKARVA	068SY4	N	289	85.3	29	45
and	Q68sy2	Q68SY2	2	289	85.3	29	44
beak and fe	Q68sy0	Q68SY0	N	289	85.3	29	43
beak and fe	Q64ig4	Q64IG4	N	288	85.3	29	42
beak and fe	Q68sx3	Q685X3	N	288	5	29	41
beak and fe	Q68sx2	Q68SX2	N	288		29	40
	Q65hz7	Q65HZ7	N	259	85.3	29	39
	P50731	YPBE_BACSU	_	240	•	29	8
anopheles g	Q7pd30	Q7PD30	N	235	85.3	29	37
clostridium	Q8×jt7	Q8XJT7	N	204	•	29	8
bovine aden	P19151	ADEN_ADEB7		202		29	35
melanoplus	Q9yvy1	Q9YVY1	2	201	•	29	34
beak and fe	Q70ap2	Q70AP2	2	199	85.3	29	ພ
	Q80kz2	Q80KZ2	2	184	•	29	32
beak and fe	Q80kz1	Q80KZ1	N	184	85.3	29	ñ
beak and fe	Q80kz0	Q80KZ0	2	184	85.3	29	õ
beak and fe	Q80ky9	Q80KY9	2	184		29	9
and	Q80ky8	Q80KY8	N	184		29	28
beak and fe	Q80ky7	Q80KY7 .	2	184	85.3	29	?7
beak and fe	Q80k×6	Q80KX6	2	184	85.3	29	6
bovine aden	Q6wgg2	Q6WGG2	N	146	85.3	29	5
clostridium	Q97eu8	Q97EU8	N	133	85.3	29	4
brachydanio	Q9iab8	Q9IAB8	N	120	85.3	29	ï
brachydanio	Q9iab7	Q9IAB7	N	110	85.3	29	2
camponotus	Q6vpa0	Q6VPA0	N	51	٠	29	12
camponotus	06qv30	Q6VP90	N	51	85.3	29	õ
drosophila	Q9w433	Q9W433	N	ന	88.2	30	9
plasmodium	096195	096195	2	1245	8	30	18
neurospora	P33538	DPOM_NEUIN	_	969	88.2	30	17
dictyosteli	2649RD	CAHORA	^	193	٠	ć	C

# ALI CHMENTS

FT	DR	ΡĽ	RT	RT.	æ	RX	RC	₽₽	R	×	ဂိ	ဂိ	S	Œ	Ŋ	ΤŢ	Ħ	Ã	D	Q6EB84	RESULT 1
NON_TER	EMBL; AY501934; AAS99001.1;	J. Bacteriol. 186:4781-4795(2004).	Whole Microbial Genome Comparisons.";	"Identification"	Poly F., Threadgill D., Stintzi A.;	PubMed=15231810; DOI=10.1128/JB.186.14.4781-4795.2004;	STRAIN=TGH 9011;	SEQUENCE FROM N.A.	Ξ	NCBI_TaxID=197;	Campylobacteraceae; Campylobacter.	Bacteria;	Campylobacter jejuni.	Tgh045 (Fragment).	25-0CT-2004 (TrEMBLrel. 28, Last annotation update)	25-OCT-2004 (TrEMBLrel.	25-OCT-2004	Q6EB84;	Q6EB84	84	LT 1
72	1934; AASS	186:47	obial Geno	ation of (	hreadgill	31810; 101	9011;	ROM N.A.		=197;	teraceae;	Proteobact	ter jejuni	agment).	4 (Trembla	4 (Trembla	4 (TrEMBLrel.		PRELIMINARY;		
72	9001.1; -	781-4795 (2	ome Compai	Campylobac	D., Stint	[=10.1128/					Campylobe	ceria; Eps			cel. 28, 1	28,	28,		VARY;		
	•	2004).	isons.";	cter jejur	zi A.;	/лв.186.14					cter.	silonprote			Last annot	Last seque	Created)		PRT;		
				ii ATCC 43		1.4781-479						obacteria			ation upo	Last sequence update)			72 AA.		
				"Identification of Campylobacter jejuni ATCC 43431-Specific Genes by		95.2004;						Bacteria; Proteobacteria; Epsilonproteobacteria; Campylobacterales;			date)	te)					
				`																	

SQ SEQUENCE 72 AA; 8601 MW; 74B8655C2DC04630 CRC64;

γ Query Match 100.0%; Score 34; DB 2; Length 72; Best Local Similarity 100.0%; Pred. No. 12; Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 1 MKYYKM 6 |||||| 1 MKYYKM 6

0;

Search completed: September 29, 2005, 12:38:17 Job time : 70 secs 뮹

ì 2

OM protein - protein search, using sw model

Run on: September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Perfect score: US-10-774-147B-33 36

Sequence: 1 МКҮҮРМ 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*
1: geneseqp1980s:\*
2: geneseqp1990s:\*
3: geneseqp2001s:\*
5: geneseqp2002s:\*
6: geneseqp2003s:\*
7: geneseqp2003bs:\*
8: geneseqp2003bs:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

		do				
Result	Score	Query Match	Query Score Match Length DB	B	ID	Description
1	1 36	100.0	6	۵ ا	100.0 6 8 ADR44752	Adr44752 Human leu
2	33	91.7	262	œ	ADM98662	Adm98662 Geranylge
ω	33	91.7	262	ω	ADM98632	Adm98632 Geranylge
4	33	91.7	262	8	ADN17402	Adn17402 Bacterial
5	32	88.9	593	æ	ADS43852	Ads43852 Bacterial
6	31	86.1	0	œ	ADR44746	Adr44746 Human leu
7	31	86.1	o	œ	ADR44740	Adr44740 Human leu
8	31	86.1	141	N	AAW28103	Aaw28103 Amino aci
9	31	86.1	330	2	AAW63590	Aaw63590 Staphyloc

ť.	1	44	2	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
67	, ,	2 5	9	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	31	31	31	31	31	31	31	31	31	31
٠	٠.	٠:	> 1		0	٥.	0	0		0	0	0	0	0	0	0	0	0	0	0	80.6	0	0	0	Ψ	Ψ	6	86.1	86.1	86.1	86.1	86.1	è		1.98	
010	1 4	200	478	457	454	454	445	347	327	250	250	250	245	232	232	228	227	224	224	212	171	170	107	60	435	260	1194	440	439	439	439	439	435	425	425	330
N	<b>o</b>	ο α	χ .	σ	ω	IJ	4	ω	ω	ω	æ	7	7	0	4	0	0	œ	ഗ	ω	7	7	7	7	ω	2	0	σ	6	4	4	N	ω	œ	W	Ν
AARBB360	ALMESTER	ວເ		8	55	ABP39593	AAG82882	ADN23670	ADN20106	ADS44522	ADI19379	ADG36926	AB077745	ABU15506	AAU33655	ABU41513	ABU40124	ADS29330	ABB5 4023	ADR08878	ADD27389	ADD27658	AD051596	ADF70002	ADN24236	AAW03520	ABU24346	ABM71279	ABU15917	AAU33979	AAU36756	AAW5 9995	ADS41859	ADJ50217	AAY43639	AAW59996
Aar88360 Caenorhab		3 1	3013	s o	7 S	3 Sta	Aag82882 S. epider	Adn23670 Bacterial	Adn20106 Bacterial	2 Ba	9 Aer	o		σ	5 Pseudomo	ω	Abu40124 Protein e	0	3 Lactor	Adr08878 Human pro	Human	8 Human		0002	σ	Aaw03520 Ball rest	Q	9	7	9	Aau36756 Staphyloc	9995	1859	0217	Aay43639 Amino aci	Aaw59996 Cell divi

#### **ALIGNMENTS**

OS Homo sapiens.			KW immune respon			XX	04-NOV-2004	XX	AC ADR44752;		ADR44752	RESULT 1
	leukocyte stimulating peptide; human.	acquired immune deficiency syndrome; AIDS; cance	immune response; pathogen; infectious disease;	Arachidonic acid release; AA release; intracellu	Human leukocyte stimulating peptide, P22.		(first entry)			ADR44752 standard; peptide; 6 AA.		

immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

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$\times \times \
                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellar calcium release in human leukocytic cells and for superoxide generation in human neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious
                                                                                                                                                                                                                                                                                                             diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New leukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune
                                                                                                                                                                                   Sequence 6 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 33; 57pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-FEB-2003; 2003US-0455621P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-FEB-2004; 2004WO-KR000225.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Көу
                                                                                                                                                                                                                                                                                invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            response to bacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-604410/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ryu S, Bae Y, Park E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2004069858-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (POSC-) POSCO.
(POST-) POSTECH FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Suh P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               infectious
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```

Query Match 100.0%; Score 36; DB 8; Length 6; Best Local Similarity 100.0%; Pred. No. 1.8e+06; Matches 6; Conservative 0; Mismatches 0; Indels 1 MKYYPM 6 мкуурм 6 0; Gaps

Search completed: September 29, 2005, 12:31:12 Job time: 80.6667 secs

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OM protein - protein search, using sw model

R E September 29, 2005, 12:15:33; Search time 20.6667 Seconds (without alignments) 21.672 Million cell updates/sec

Perfect score: US-10-774-147B-33 36

1 MKYYPM 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries Maximum Match 100%

Database : Issued\_Patents\_AA: \* /cgn2\_6/ptodata/1/iaa/5A\_COMB.pep: + /cgn2\_6/ptodata/1/iaa/5B\_COMB.pep: + /cgn2\_6/ptodata/1/iaa/6B\_COMB.pep: + /cgn2\_6/ptodata/1/iaa/6B\_COMB.pep: + /cgn2\_6/ptodata/1/iaa/FCTUS\_COMB.pep: + /cgn2\_6/ptodata/1/

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

/cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

11	10	9	8	7	0	<sub>5</sub>	4	ω	2	_	Result No.	
29	29	30	31	31	31	31	31	31	31	31	Score	
80.6	80.6	83.3	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	Query	αÞ
445	245	260	526	526	439	439	425	330	330	330	Query Match Length DB	
4	4	_	2	_	ω	ω	4	ω	ω	8	B	
US-09-710-279-2858	US-09-252-991A-26491	US-08-595-559-1	US-08-493-754A-4	US-08-399-986B-4	US-09-411-763-2	US-08-921-209-2	US-09-293-549-6	US-09-411-763-4	US-08-921-209-4	US-08-827-615-2	ID	
	Sequence 26491, A	Sequence 1, Appl	Sequence 4, Appl	Sequence 4, Appl:	Sequence 2, Appl:	Sequence 2, Appl	Sequence 6, Appl	Sequence 4, Appl:	Sequence 4, Appl:	Sequence 2, Appl	Description	

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29
77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	80.6	80.6	80.6	80.6	80.6	80.6
773	743	654	654	609	539	517	505	485	484	413	394	296	295	284	284	274	250	250	248	241	241	207	200	171	151	109	90	515	515	515	510	510	454
4	ω	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Δ	ω	N	4	ω	4	ω	ω	W	ഗ	-	ω
US-09-949-016-11277	US-09-077-354B-2	US-09-949-016-8842	US-09-949-016-8841	US-09-248-796A-19292	US-09-248-796A-16770	US-09-248-796A-14652	US-09-270-767-43800	US-09-248-796A-18130	US-09-270-767-60873	US-09-489-039A-12692	US-09-949-016-7566	US-09-107-532A-6365	US-09-543-681A-6431	US-09-270-767-55474	US-09-270-767-40258	US-09-134-000C-4219	US-09-489-039A-8907	US-09-107-532A-4737	US-09-134-000C-5840	US-09-270-767-49906	US-09-270-767-34689	US-09-248-796A-19595	US-09-519-729-1	US-08-946-528-3	US-09-861-451A-76	US-09-134-001C-3914	US-09-328-352-5812	US-08-434-831B-35	US-08-582-776C-38	US-08-369-822C-23	PCT-US95-06556-3	US-08-249-112-3	US-09-134-001C-4438
H	2, App	88	Φ	Sequence 19292, A		Sequence 14652, A		Sequence 18130, A	60873,	e 12692,	e 7566,	e 6365,	Sequence 6431, Ap	55474,	Sequence 40258, A	4219,	e 8907	e 4737,	5840,	49906,		19	,-	3, 7	e 76, Aç	в 3914,	e 5812	e 35,	e 38,	23	ω	Sequence 3, Appli	Sequence 4438, Ap

Search completed: September 29, 2005, 12:42:02 Job time : 20.6667 secs

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OM protein - protein search, using sw model

Run on: September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Sequence: Perfect score: US-10-774-147B-33 36 1 MKYYPM 6

Scoring table: BLOSUM62

Searched: 1846076 seqs, 415116000 residues Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters:

1846076

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

# Database :

```
Published_Applications_AA:

1: /cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:
2: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
4: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
5: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
5: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
7: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:
7: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:
8: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:
9: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
11: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
11: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
11: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
12: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
13: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
14: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
15: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
16: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
17: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
18: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
19: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
20: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
21: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.

Search completed: September 29, 2005, 12:49:48 Job time :  $76.5 \ \text{secs}$ 

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OM protein - protein search, using sw model

September 29, 2005, 12:13:23; Search time 14.5 Seconds (without alignments) 39.814 Million cell updates/sec

Title:
Perfect score:
Sequence: US-10-774-147B-33 36 1 MKYYPM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR\_79:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

13	12	11	10	9	ω	7	6	5	4	ω	2	_	Result No.	
31	31	31	31	31	31	31	31	31	32	32	33	33	Score	
86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	88.9	88.9	91.7	91.7	Query Match	æ
1308	976	562	557	466	439	425	220	193	593	348	574	262	Query Match Length DB	
2	N	Ν	N	N	N	_	N	N	N	N	N	N	BB	
T15280	E75212	C72278	E72282	H71234	C89890	S48469	T33592	D72367	S38145	T19885	C86400	E70365	ID	
hypothetical prote	oligosaccharyl tra	hypothetical prote	oligopeptide ABC t	probable 4-aminobu	hypothetical prote	probable membrane	hypothetical prote	hypothetical prote	uroporphyrinogen m	hypothetical prote	hypothetical prote	geranylgeranyl pyr	Description	

			30	77.8	28	45
hypothetical prote	T00725		25	77.8	28	44
protein K04F1.1			2	77.8	28	43
hypothetical prote	AF1057		246	77.8	28	42
probable glutamine			218	77.8	28	41
proteasome psmB,	T48879		210	77.8	28	6
molybdenum transpo	н90025		20	77.8	28	39
ubiquinone/menaqui	B75137		200	77.8	28	38
hypothetical prote	S48422		1.	77.8	28	37
hypothetical prote	G90036	51 2	151	77.8	28	36
T-cell receptor a	S21648		۳.	77.8	28	35 5
T-cell receptor al	S21646		146	77.8	28	34
T-cell receptor al		11 2	141	77.8	28	ည
T-cell receptor al	D27577		140	77.8	28	32
genome polyprotein			2116	80.6	29	31
RF2 protein - yeas	S07915	16 2	1146	80.6	29	30
ABC transporter (A	E83794		583	80.6	29	29
hypothetical prote	T20754		495	80.6	29	28
hypothetical prote	T24805	78 2	478	80.6	29	27
avermectin-sensiti	S50864		461	80.6	29	26
hypothetical prote	D90067	57 2	457	80.6	29	25
	T22539		414	80.6	29	24
hypothetical prote			348	80.6	29	23
hypothetical prote	T29742	17 2	347	80.6	29	22
	S76143		μ	80.6	29	21
hypothetical prote	F69515	98 2	2	80.6	29	20
probable thioredox	B72454		25	80.6	29	19
outer membrane pro			2	80.6	29	18
hypothetical prote			224	80.6	29	17
hypothetical prote			435	83.3	30	16
restriction endonu	S71507	50 2	260	83.3	30	15
RNA-directed RNA p	A43377	14 1	14	86.1	31	14

Search completed: September 29, 2005, 12:39:51 Job time : 14.5 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments)
43.893 Million cell updates/sec

US-10-774-147B-33 36

Title:
Perfect score:
Sequence: 1 MKYYPM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters:

1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : UniProt\_03:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

															_
15	14	13	12	. 11	10	9	80	7	Q	s	4	ω	N	1	Result No.
31	31	31	31	31	31	31	32	32	32	32	32	33	33	33	Score
86.1	86.1	86.1	86.1	86.1	86.1	86.1	88.9	88.9	88.9	88.9	88.9	91.7	91.7	91.7	Query Match
335	273	259	220	214	210	193	593	524	364	237	145	574	273	262	Query Match Length DB
~	2	2	Ν	2	N	2	<b>-</b>	N	N	N	2	N	Ν	_	,
007671	Q6C124	Q6E0T8	Q9TZA6	Q7RFU7	Q974J1	Q9WZ04	SUMT_YEAST	Q8UZJ2	017659	Q85BC3	Q6SFT0	Q9SXC9	Q6CHE9	ISPA_AQUAE	ID
007671 enterococcu	Q6c124 yarrowia l	Q6e0t8 borrelia	Q9tza6 caenorhabd	Q7rfu7 plasmodium	Q974j1 sulfolobus	Q9wz04 thermotoga	P36150 saccharomyc	Q8uzj2 cercopithec	017659 caenorhabdi	Q85bc3 dasyhelea	Q6sft0 uncultured	Q9sxc9 arabidopsis	Q6che9 yarrowia l	066952 aquifex aec	Description
occu	11	ed t	ibdi	Lum	Suc	ga	omyc	thec	abdi	98 5	red	5180	11	aeo	į

	2005. 12:38:17	ŏ	ember	Sept.	earch completed: September 29.	ea rch
Q7rkb3 plasmodium	Q7RKB3	N	460	ω	30	45
Q18518 caenorhabdi	Q18518	N	460	83.3	30	44
Q64w36 bacteroides	Q64W36	N	303	83.3	30	43
P71102 curtobacter	P71102	N	260	ω	30	42
Q7rn94 plasmodium	Q7RN94	N	193	Ψ	30	41
Q6p4v6 brachydanio	Q6P4V6	N	170	ω	30	40
Q98631 rice dwarf	RRPL_RDVF	-	1444	٥.	31	39
Q02119 rice dwarf	RRPL_RDVA	<u>, , , , , , , , , , , , , , , , , , , </u>	1444	86.1	31	38
001924 caenorhabdi	001924	N	1308	86.1	31	37
	Q7XNL1	N	1262	86.1	31	36
	Q9V250	2	976	86.1	31	35
Q7qnt4 giardia lam	Q7QNT4	2	959	86.1	31	34
Q6tw71 orf virus.	Q6TW71	N	811	86.1	31	33
Q7u5m5 synechococc	Q7U5M5	N	699	86.1	31	32
Q63rf7 burkholderi	Q63RF7	2	615	86.1	31	31
Q62i62 burkholderi	Q62162	2	615	86.1	31	30
	Q65X38	N	613	86.1	31	29
Q9x0v3 thermotoga	Q9X0V3	N	562	86.1	31	28
	Q9X0V0	N	557	86.1	31	27
Q7r3p5 giardia lam	Q7R3P5	N	517	86.1	31	26
	057878	N	466	86.1	31	25
	Q6GHQ1	N	440	86.1	31	24
Q6ga28 staphylococ	Q6GA28	N	440	86.1	31	23
Q7a618 staphylococ	Q7A618	N	439	86.1	31	22
Q99ut0 staphylococ	Q99UT0	N	439	86.1	31	21
Q8nx34 staphylococ	QBNX34	N	439	86.1	31	20
007324 staphylococ	007324	N	439	86.1	31	19
Q75az9 ashbya goss	Q75AZ9	N	426	86.1	31	18
	YIK3_YEAST	_	425	86.1	31	17
Q6clc9 kluyveromyc	Ø6CTC9	2	422	86.1	31	16

Search completed: September 29, 2005, 12:38:17 Job time: 70 secs

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OM protein - protein search, using sw model

September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments)
28.767 Willion cell updates/sec

Title: Perfect score: Sequence: US-10-774-147B-34 33 1 MKYYVM 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

A\_Geneseq\_16Dec04:\*
1: geneseqp1980s:\*
2: geneseqp1990s:\*
3: geneseqp2000s:\*
4: geneseqp2001s:\*
5: geneseqp2002s:\*
6: geneseqp2003as:\*
7: geneseqp2003bs:\*
8: geneseqp2003bs:\*

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	% Query Match Length DB	DB B	ID	Description
ı	33	100.0	100.0 6	œ	ADR44753	Adr44753 Human leu
~	30	90.9		σ	ABM72061	Abm72061 Staphyloc
ω	29	87.9	457	G	ABP27386	Abp27386 Streptoco
4	29	87.9		σ	ABU44132	Abu44132 Protein e
s	29	87.9	483	ဟ	ABP27387	Abp27387 Streptoco
6	29	87.9	483	6	ABU46697	Abu46697 Protein e
7	28	84.8	6	œ	ADR44741	Adr44741 Human leu
8	28	84.8	6	œ	ADR44750	Adr44750 Human leu
9	28	84.8	6	ø	ADR44754	Adr44754 Human leu

#### ALI GNMENTS

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ADR44753 standard; peptide; 6 AA.

ADR44753;

04-NOV-2004 (first entry)

Human leukocyte stimulating peptide, P23.

Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

Homo sapiens.

New laukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune 07-FEB-2003; 2003US-0455621P Key Modified-site Ryu S, 06-FEB-2004; 2004WO-KR000225 WPI; 2004-604410/58. 19-AUG-2004. WO2004069858-A2. (POSC-) POSCO. (POST-) POSTECH FOUND. Bae Y, Park E, /note= "C-terminal amide" Location/Qualifiers Suh ۵,

Claim 1; SEQ ID NO 34; 57pp; English.

response to bacteria.

The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human leukocyte stimulating peptide. This sequence is used in the

Sequence 6 AA;

Query Match 100.0%; Score 33; DB 8; 1 Best Local Similarity 100.0%; Pred. No. 1.8e+06; Matches 6; Conservative 0; Mismatches 0; Length 6; Indels 0; Gaps

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밁 Ş 1 MKYYVM 6 1 MKYYVM 6

Search completed: September 29, 2005, 12:31:12 Job time : 80.6667 secs

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OM protein - protein search, using sw model

September 29, 2005, 12:15:33; Search time 20.6667 Seconds (without alignments)
21.672 Million cell updates/sec

Perfect score: 33US-10-774-147B-34

1 MKYYVM 6

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 513545

513545 seqs, 74649064 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : Issued\_Patents\_AA:\* /cgn2\_6/ptodata/1/iaa/5A\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/5B\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/6B\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/6B\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

/cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Result	Score	Query Match	Query Match Length DB	DB.	ID	Description
1	30	90.9	310	4	US-09-248-796A-17322	Sequence 17322, A
2	28	84.8	408	4	US-09-802-213-9	Sequence 9, Appli
ω	28	84.8	557	ω	US-09-027-064-2	Sequence 2, Appli
4	28	84.8	557	ω	US-09-271-815-2	Sequence 2, Appli
ۍ	28	84.8	763	N	US-08-677-862-2	Sequence 2, Appli
6	28	84.8	763	N	US-09-252-571-2	Sequence 2, Appli
7	28	84.8	763	ω	US-09-434-065-2	Sequence 2, Appli
89	28	84.8	763	ω	US-08-789-275-4	Sequence 4, Appli
9	28	84.8	763	ω	US-08-789-275-5	Sequence 5, Appli
10	28	84.8	1063	4	US-09-270-767-44682	Sequence 44682, A
11	28	84.8	1347	4	US-09-949-016-9603	Sequence 9603, Ap

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28
81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8		81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	84.8	84.8	4.	٠.	•	٠.	84.8	84.8	84.8	84.8	84.8	84.8
1417	1417	1417	1122	764	639	594	580	488	424	414	403	393	393	393	327	320	320	228	227	106	73	1484	1484	1484	1484	1484	1484	1484	1484	1484	1484	1482	1456
ω	ω	N	4	4	4	2	ω	4	4	4	4	4	ω	2	4	4	ω	4	4	4	4	4	4	4	4	ω	ω	ω	ω	٧.	2	_	μ.
US-09-175-828-78	US-08-781-891-78	US-08-559-303B-78	US-09-489-039A-8554	US-09-270-767-45772	US-09-270-767-61294	US-08-910-856-2	US-08-913-159-10	US-09-248-796A-18644	US-09-248-796A-21323	US-09-802-213-3	US-09-802-213-5	US-09-753-143-74	US-09-175-828-74	US-08-559-303B-74	US-09-543-681A-8331	US-09-699-135-41	US-09-463-702A-41	US-09-270-767-33496	US-09-270-767-48713	US-09-543-681A-7810	US-09-489-039A-8297	US-10-038-937-56	US-09-949-016-5998	US-09-386-123-56	US-09-648-797-56	US-08-264-578-2	US-08-935-105A-56	US-08-940-035A-56	US-08-940-086A-56	US-08-486-273A-56	US-08-231-193A-56	US-08-026-138E-2	US-08-026-138E-8
78,	78,	78, Ap	Sequence 8554, Ap	-	9		1	Sequence 18644, A	21:	Sequence 3, Appli	5, 2	в 74,	74,	Sequence 74, Appl	833	41,	_	Ф	e 48713,	7810,	8297	56, A	5998	56,	56	e 2, A	e 56,	e 56,	56,	56,	56	2	Sequence 8, Appli

Search completed: September 29, 2005, 12:42:02 Job time: 20.6667 secs

### GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Sequence: Perfect score: US-10-774-147B-34 33 1 MKYYVM 6

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: Searched: 1846076 seqs, 415116000 residues 1846076

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : Published\_Applications\_AA:\*

1: /cgn2\_6/ptodata/1/pubpaa/USO7\_PUBCOMB.pep:\*

2: /cgn2\_6/ptodata/1/pubpaa/USO6\_NEW\_PUB.pep:\*

4: /cgn2\_6/ptodata/1/pubpaa/USO6\_NEW\_PUB.pep:\*

4: /cgn2\_6/ptodata/1/pubpaa/USO6\_PUBCOMB.pep:\*

5: /cgn2\_6/ptodata/1/pubpaa/USO6\_PUBCOMB.pep:\*

6: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

7: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

9: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

10: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

11: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

12: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

13: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

14: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

15: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

16: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

16: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

16: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

16: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

16: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

17: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

18: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

19: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

20: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

21: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

22: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

22: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

22: /cgn2\_6/ptodata/1/pubpaa/USO9\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result

Query Score Match Length DB ID

Description

45	ž ć	3 2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	ഗ	4	ω	2	-
27	, ,	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	33
81.8	٠:	٠.	81.8	:	8.18	•	81.8	81.8	81.8	۵.	84.8	4	84.8	4	4	4	84.8	٥.	٠.	٠.	٠.	٠.	4	•	٠.	٠.	84.8	٠.	4	4		84.8	•	4.	84.8	84.8	84.8	87.9	87.9	87.9	.7	~	100.0
287	0 0	255	219	194	167	121	24	6	6	1829	1484	1484	1484	1484	1480	763	671	567	531	491	421	421	408	408	408	366	320	264	263	237	122	109	13	0	σ	6	6	1407	1229	483	462	28	6
18	ä	18	18	16	18	15	15	16	16	17	14	14	ω		10	15	16	15	10	14	18	16	20	16	9	9	15	16	15	16	16	9	18		16			16	16	15	15	15	16
US-10-450-763-48011	-10-501-	10-501-282-	-10-501-282-	-767-	US-10-501-282-4760	US-10-424-599-218487	US-10-424-599-276251	147B-3	US-10-774-147B-32	923-	US-10-146-806-2	US-10-038-937-56	US-10-007-747-56	-945-901	US-09-922-011-10	168	10-425-115-	N	11	US-10-156-761-12739	US-10-941-635-134	132	US-11-097-143-11229	US-10-625-492-9	US-09-802-213-9	US-09-764-864-1060	US-10-282-122A-51645	US-10-425-115-256190	US-10-282-122A-48666	23	US-10-425-115-271499	US-09-764-864-1483	US-10-948-707-1092	US-10-774-147B-35	US-10-774-147B-31	US-10-774-1478-28	US-10-774-147B-22	US-10-437-963-132720	US-10-437-963-132817	US-10-282-122A-74621	2-1	-10-424-	US-10-774-147B-34
Sequence 48011, A	9 4/56	e 4764,	e 4762,	Φ	Φ	Φ	e 2762	33,	Φ	226	2, ,	56,	в 56.	56,	Φ	Φ	Φ	e 290	0	e 12739	e 134,	Φ	e 112	9	9, App	1060,	Φ	Ф	Φ		e 27149		e 1092	e 35,	e 31,	e 28,	Φ	Φ	Φ	Φ	Φ	e 2069	Sequence 34, Appl

ALI CAMENTS

RESULT 1 US-10-774-147B-34

```
Sequence 34, Application US/10774147B

PNELCANT: NO. US20040248253A1

EDEBEAL INFORMATION:
APPLICANT: POSTECH Foundation
APPLICANT: SUGARDAY
APPLICANT: POSTECH
APPLICANT: POSTEC
```

0;

OM protein - protein search, using sw model

September 29, 2005, 12:13:23; Search time 14.5 Seconds
(Without alignments)
39.814 Million cell updates/sec

Title:
Perfect score:
Sequence: US-10-774-147B-34 33 1 MKYYVM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 283416

283416 seqs, 96216763 residues

Minimum DB seq length: 0
Meximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : PIR\_79:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Query Match Length DB	DB	ID	Description
٠ !	30	90.9	1010	2	B86259	protein T12C24.2 (
2	30	90.9	1036	N	A42895	H+/K+-exchanging A
ω	29	87.9	196	Ν	В96980	uncharacterized co
4	28	84.8	53	2	\$42286	gene 0.6A protein
ر. ت	28	84.8	73	2	AB2594	hypothetical prote
6	28	84.8	84	2	C90210	conserved hypothet
7	28	84.8	111	_	WOBP67	gene 0.6B protein
œ	28	84.8	277	_	G71101	hypothetical prote
9	28	84.8	320	N	C97206	probable membrane,
10	28	84.8	335	~	E71201	probable glucose-f
I	28	84.8	366	8	E90525	ABC transporter pe
12	28	84.8	471	ν	A45616	antigenic protein
13	28	84.8	589	N	JG0196	protein kinase DVR

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	
81.8	81.8	81.8	81.8	81.8		81.8	:	81.8	-	-	81.8	-	81.8	-	81.8	81.8	81.8	-	-	81.8	4	•	٠.	84.8	84.8	84.8	٠.	٩.	84.8	٠.	84.8	
1417	1108	1107	1107	1107	688	522	505	469	465	460	459	457	404	345	337	337	337	307	231	129	3498	2652	1484	1482	1482	1202	1041	757	754	727	629	
2	2	N	N	2	N	N	ν	2	2	N	N	2	N		2	2	N	Ν	N				N	N	N	2	N	2	N	N	2	
A57570	AF1047	E65226	B86112	B91271	\$50580	T28113	T28276	T34173	T19113	T19111	T19110	T19109	A44833	MFVNSY	AF1630	AD1268	D69660	A71605	D65217	E90331	T22330	VFIHB2	S52086	B43274	I49704	PQ0440	PQ0442	E97230	JC4898	JC7818	JG0195	
Bloom's syndrome r	probable membrane	hypothetical 123.8	probable periplasm			hypothetica	ř.					hypothetical prote	lactocepin (EC 3.4	matrix protein - S	_cell-shape determi	cell-shape determi	rod shape-determin	probable integral		hypothetical prote	hypothetical prote	genome polyprotein	N-methyl-D-asparta	N-methyl-D-asparta	glutamate receptor	polyprotein - barl	polyprotein - barl	trehalose/maltose	Down-syndrome-crit	metalloproteinase	protein kinase DYR	

Search completed: September 29, 2005, 12:39:51 Job time : 14.5 secs

OM protein - protein search, using sw model

September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments) 43.893 Million cell updates/sec

Title: Perfect score: Sequence: US-10-774-147B-34 33

1 MKYYVM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters: 1612378

1612378 seqs, 512079187 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : UniProt\_03:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result	Score	% Query Match	% Query Match Length	DB	ID	Description
- :	33	100.0	335	2	Q8GP65	Q8gp65 streptococc
2	32	97.0	373	N	Q697F8	
ω	30	90.9	108	N	QBEJN3	Q8ejn3 shewanella
4	30	90.9	226	N	Q9QW05	
υ	30	90.9	287	N	QBV3Q3	
0	30	90.9	490	2	Q621P8	Q62ip8 burkholderi
7	30	90.9	490	N	Q63VM0	Q63vm0 burkholderi
œ	30	90.9	1010	٨	Q9LN91	Q9ln91 arabidopsis
9	30	90.9	1035	_	ATHL_MOUSE	Q9z1w8 mus musculu
10	30	90.9	1036	<b>-</b>	ATHL_RAT	P54708 rattus norv
11	30	90.9	1163	N	Q8XKW3	Q8xkw3 clostridium
12	30	90.9	1574	N	Q6DRC7	Q6drc7 brachydanio
13	29	87.9	187	N	Q64T81	Q64t81 bacteroides
14	29	87.9	196	N	Q97LB0	Q971b0 clostridium
15	29	87.9	364	-	TRU2_THETN	Q8r7f0 thermoanaer

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9
226	204	187	164	129	123	117	111	105	103	84	73	53	53	3290	1806	817	633	613	597	597	588	483	483	483	483	462	457	457	417
N	N	N	2	N	N	2	-	N	N	2	N	2	N	N	N	2	2	2	N	2	N	N	N	N	N	N	N	N	N
Q8J107	Q6AXW7	Q812B8	Q8X052	Q8XNC3	Q9PW83	Q6FTA8	V06_BPT7	Q8D9S2	Q6Y7K6	Q97ZQ8	Q8UIZ7	Q6WYR9	Q6WY58	Q7RRX0	Q6LFB1	Q7QANO	Q8MTK1	Q89HC1	Q631W2	Q62EB8	Q6N209	Q878W3	Q99Z85	Q8Р0H3	Q8K721	Q8DUV5	Q8E6F6	Q8E0T8	Q6CMW6
Q8ji07 brachydanio	Q6axw7 rattus norv	Q8i2b8 plasmodium	Q8x052 neurospora		Q9pw83 myoxocephal	Q6fta8 candida gla	P03778 bacteriopha	Q8d9s2 vibrio vuln	Q6y7k6 staphylococ			Q6wyr9 bacteriopha	Q6wy58 bacteriopha	Q7rrx0 plasmodium		Q7qan0 anopheles g		Q89hc1 bradyrhizob	Q63iw2 burkholderi	_	Q6n209 rhodopseudo		Q99z85 streptococc	Q8p0h3 streptococc	Q8k721 streptococc	Q8duv5 streptococc	Q8e6f6 streptococc	Q8e0t8 streptococc	Q6cmw6 kluyveromyc

### ALI GNMENTS

SS	DR	DR.	DR	DR	RL	RA	RP	RN	×	ဂိ	გ	SO	2	DE	DŢ	DT	DT	ΑĊ	ID	Q8GP65	RESULT 1
SEQUENCE :	Pfam; PF0175	InterPro; II	GO; GO:0016	EMBL; AF 4545	Submitted (1	Rallu F., El	SEQUENCE FROM N.A.	Ξ	NCBI_TaxID=1308;	Streptococcus	Bacteria; Fi	Streptococcu	Name=eps100;	Eps100.	01-JUN-2003	01-MAR-2003	01-MAR-2003	Q8GP65;	Q8GP65	65	LT 1
335 AA; 39165 MW; 3D4218614060BC92 CRC64;	Pfam; PF01757; Acyl_transf_3; 1.	<pre>InterPro; IPR002656; Acyl_transf_3.</pre>	147; F:transfera	EMBL; AF454500; AAN63775.1;	DEC-2001) to the	Rallu F., Ehrlich D.S., Renault P.;	M N.A.		1308;	15.	irmicutes; Lacto	Streptococcus thermophilus.			01-JUN-2003 (TrEMBLrel. 24, Last annotation update)	(TrEMBLrel. 23,	(TrEMBLrel. 23,		PRELIMINARY;		
лw; 3D4218614	3; 1.	cransf_3.	ase activity,	.!	EMBL/GenBank	nault P.;					bacillales; S	•			, Last annotat	, Last sequence update)	, Created)		PRT; 335		
1060BC92 CRC64;			GO; GO:0016747; F:transferase activity, transferring groups o.		Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.						Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;				tion update)	e update)			335 AA.		
			:.																		

IEA.

Query Match 100.0%; Score 33; DB 2; Length 335; Best Local Similarity 100.0%; Pred. No. 39; Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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망 1 MKYYVM 6 |||||| 200 MKYYVM 205

Search completed: September 29, 2005, 12:38:18 Job time : 71 secs

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OM protein - protein search, using sw model

September 29, 2005, 12:04:53; Search time 80.6667 Seconds (without alignments) 28.767 Million cell updates/sec

Title: Perfect score: US-10-774-147B-35 36 1 МКҮҮҮМ 6

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*
1: geneseqp1900s:\*
2: geneseqp1990s:\*
3: geneseqp2001s:\*
5: geneseqp2002s:\*
6: geneseqp2003as:\*
7: geneseqp2003as:\*
8: geneseqp2003as:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

444		39 40			ω ω • ω		31														16			13		11	
29	29	29	2 6	30	300	31	31	: 2	31	31	31	31	31	31	31	31	ដ	31	31	31	31	31	31	31	33	33	33
80.6		B 0 0 0		83.3	83.3	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	91.7	91.7	91.7
199	166	138	. 89 5	845	150	509	509	438	434	432	406	333	297	276	215	169	169	148	148	110	110	91	0	6	504	504	504
770	7 8	400	44.	. 4.	7 2	ω	N a	, o	σ	σ	2	ω	თ	ω	4	ω	ω	œ	Çī	0	4	ഗ	œ	œ	æ	7	7
ADF74794 ADF74792	ADS04576 ADJ38055	AA001396 AAY44013 ABP39434	AAG64443 AAM90587	ABB63310	AAW98204 ABO61273	AAY44603	AAY14138	ADB10722	ABP75890	ADB10724	AAR1 2395	AAG47283	AAU73401	AAG11708	ABB65782	AAG11709	AAG47284	ADS06816	ABP38990	ABM37293	AAU40774	ABP42120	ADR44748	ADR44742	ADI19748	ADF90913	ADD48632
Adf74794 H Adf74792 H		Aa001396 H Aay44013 H Ahn39434 S			Aaw98204 H		Aay14138 Z											-				_	Adr44748 H	Adr44742 H			Add48632 H
Mortierei Human NOV	Staphyloc Mortierel	Human pol Human tes	Human Pol	Drosophil	H. pylori	Maize MLO	Zea mays	Alloiococ	Human sec	Alloiococ	Transcrip	Arabidops	Ehrlichia	Arabidops	Drosophil	Arabidops	Arabidops	Staphyloc	Staphyloc	Propionib	Propionib		Human leu				Human Pro

#### ALI GUMENTS

754 ADR44754 standard; peptide; 6 AA. ADR44754; 04-NOV-2004 (first entry)
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Arachidonic acid release; AA release; intracellular calcium release; immune response; pathogen; infectious disease; acquired immune deficiency syndrome; AIDS; cancer; gene therapy; leukocyte stimulating peptide; human.

Homo sapiens.

```
New laukocyte stimulating polypeptides useful for stimulating arachidonic acid release in target cells or for causing intracellular calcium release, and in gene therapy applications, such as to enhance immune
                                                                                                                                                                                                             07-FEB-2003; 2003US-0455621P
                                                                                                                                                                                                                             06-FEB-2004; 2004WO-KR000225.
                                                                                                                                                                                                                                                                                 Key
Modified-site
                                                                                                                                                        WPI; 2004-604410/58.
                                                                                                                                                                      Ryus,
                                                                                                                                                                                                                                                            WO2004069858-A2.
                                                                                                                                                                                      (POST-) POSTECH FOUND.
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                                                                                                                                                                      Bae Y, Park E,
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                                                                                                                                                                                                                                                                                         Location/Qualifiers
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diseases such as acquired immune deficiency syndrome (AIDS) and cancer. The invention is also useful in gene therapy. The present sequence is human jeukocyte stimulating peptide. This sequence is used in the neutrophils. The invention is also used to enhance immune response to pathogens such as bacteria and viruses and in the treatment of infectious The present invention relates to a target cell stimulating peptide where the target cell may be a leukocyte or a phagocyte. The invention is useful for stimulating arachidonic acid (AA) and intracellular calcium release in human leukocytic cells and for superoxide generation in human

Claim 1; SEQ ID NO 35; 57pp; English.

response to bacteria.

Query Match
Best Local Similarity
Matches 6; Conserv Conservative 100.0%; Score 36; DB 8; 100.0%; Pred. No. 1.8e+06; vative 0; Mismatches 0; ç Length 6; Indels 0, Gaps

0

Sequence 6 AA;

뭉 Š 1 MKYYYM 6 мкүүүм 6

Search completed: September 29, 2005, 12:31:12 Job time : 80.6667 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein protein search, using sw model

September 29, 2005, 12:15:33; Search time 20.6667 Seconds (without alignments) 21.672 Million cell updates/sec

Title: Perfect score: US-10-774-147B-35

1 MKYYYM 6

BLOSUM62

Scoring table: Gapop 10.0 , Gapext 0.5

513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Database : Issued\_Patents\_AA: \*

Listing first 45 summaries Maximum Match 100%

/cgn2\_6/ptodata/1/iaa/5A\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/5B\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/6B\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/6B\_COMB.pep:\*
/cgn2\_6/ptodata/1/iaa/PCTUS\_COMB.pep:\* /cgn2\_6/ptodata/1/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Query Match Length DB		ID	Description
1	33	91.7	482	¦	US-08-135-510-5	Sequence 5, Appli
2	33	91.7	482		US-08-483-852-5	Sequence 5, Appli
ω	33	91.7	482	-	US-08-477-953-5	Sequence 5, Appli
4	33	91.7	482	Ŋ	US-08-477-952-5	Sequence 5, Appli
ហ	33	91.7	504	<u>, .</u>	US-08-135-511-28	Sequence 28, Appl
6	33	91.7	504	-	US-08-483-852-8	Sequence 8, Appli
7	33	91.7	504	-	US-08-361-458-3	Sequence 3, Appli
8	33	91.7	504	_	US-08-477-953-8	Sequence 8, Appli
9	33	91.7	504	<b>-</b>	US-08-187-453-28	Sequence 28, Appl
10	33	91.7	504	2	US-08-477-952-8	Sequence 8, Appli
11	33	91.7	504	4	US-09-762-415-4	Sequence 4, Appli

45	43	42	41	40	39	38	37	36	35	34	ယ ယ	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	30	30	31	31	31	31	31	31	33	33	33
80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	83.3	83.3	86.1	86.1	86.1	86.1	86.1	86.1	91.7	:	91.7
293	289	289	289	286	280	280	259	259	258	257	243	219	178	178	166	151	151	138	66	23	23	467	282	509	509	509	509	148	121	507	506	506
44	4.	•	4	4	4	4	4	4	4	4	4	4	4	4	ω	ω	_	N	4	4	4	4	4	4	4	ω	-	ω	4	4	ω	Ν
US-09-145-828A-12	US-09-903-456-34	US-09-903-456-21	US-09-145-828A-17	US-09-903-456-59	US-09-903-456-28	US-09-145-828A-21	US-09-270-767-52816	US-09-270-767-37599	US-09-698-781-3	US-09-949-016-7490	US-09-541-759-7	US-09-903-456-38	US-09-903-456-26	US-09-145-828A-24	US-09-134-001C-4279	US-09-130-287-28	US-08-614-935-28	US-07-857-224B-112	US-09-248-796A-23669	US-09-270-767-50769	US-09-270-767-35552	US-09-489-039A-7790	US-09-248-796A-25927	US-09-535-315-8	US-09-347-650-6	US-09-183-959-8	US-10-095-946-8	US-09-134-001C-3835	US-09-248-796A-14633	US-09-949-016-10802	US-09-270-751-18	US-08-845-161A-18
Sequence 12, Appl	34,	21,	17,	59,	28,				3, App		Sequence 7, Appli		26,		427	28,	28,	Sequence 112, App	Sequence 23669, A		35552,		25	8	0	æ	B, App	Sequence 3835, Ap	Sequence 14633, A	1080	18,	Sequence 18, Appl

Search completed: September 29, 2005, 12:42:02 Job time : 20.6667 secs

### GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: September 29, 2005, 12:23:19; Search time 76.5 Seconds (without alignments) 32.558 Million cell updates/sec

Perfect score: Title: US-10-774-147B-35 1 MKYYYM 6

Sequence:

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Published\_Applications\_AA:\*

1: /cgn2\_6/ptodata/1/pubpaa/US07\_PUBCOMB.pep:\*

2: /cgn2\_6/ptodata/1/pubpaa/PCT\_NEW\_PUB.pep:\*

3: /cgn2\_6/ptodata/1/pubpaa/US06\_NEW\_PUB.pep:\*

4: /cgn2\_6/ptodata/1/pubpaa/US06\_PUBCOMB.pep:\*

5: /cgn2\_6/ptodata/1/pubpaa/US07\_NEW\_PUB.pep:\*

6: /cgn2\_6/ptodata/1/pubpaa/US08\_NEW\_PUB.pep:\*

7: /cgn2\_6/ptodata/1/pubpaa/US08\_NEW\_PUB.pep:\*

8: /cgn2\_6/ptodata/1/pubpaa/US08\_PUBCOMB.pep:\* 1: 2: 3: 44: 4: 4: 5: 6: 6: 7: 9: 110: 111: 111: 112: 113: 114: 115: 116: 116: 117: 118: 118: 119 9: /cgn2\_6/ptcdata/1/pubpaa/US99A\_PUBCOMB\_pep:
10: /cgn2\_6/ptcdata/1/pubpaa/US99A\_PUBCOMB\_pep:
11: /cgn2\_6/ptcdata/1/pubpaa/US99B\_PUBCOMB\_pep:
12: /cgn2\_6/ptcdata/1/pubpaa/US99C\_PUBCOMB\_pep:
12: /cgn2\_6/ptcdata/1/pubpaa/US99\_NEW\_PUB\_pep:
13: /cgn2\_6/ptcdata/1/pubpaa/US10A\_PUBCOMB\_pep:
14: /cgn2\_6/ptcdata/1/pubpaa/US10A\_PUBCOMB\_pep:
15: /cgn2\_6/ptcdata/1/pubpaa/US10C\_PUBCOMB\_pep:
16: /cgn2\_6/ptcdata/1/pubpaa/US10C\_PUBCOMB\_pep:
17: /cgn2\_6/ptcdata/1/pubpaa/US10\_PUBCOMB\_pep:
18: /cgn2\_6/ptcdata/1/pubpaa/US10\_NEW\_PUB\_pep:
19: /cgn2\_6/ptcdata/1/pubpaa/US10\_NEW\_PUB\_pep:
20: /cgn2\_6/ptcdata/1/pubpaa/US10\_NEW\_PUB\_pep:
21: /cgn2\_6/ptcdata/1/pubpaa/US10\_NEW\_PUB\_pep:
22: /cgn2\_6/ptcdata/1/pubpaa/US10\_NEW\_PUB\_pep:
23: /cgn2\_6/ptcdata/1/pubpaa/US10\_NEW\_PUB\_pep:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result

No.	Score	Query Match	Length	DB	ID	Description
-	36	100.0	6	16	US-10-774-147B-35	Sequence 35, Appl
2		91.7	477	20	-11-097-143-	9 1968 9
ω	33	91.7	484	20	-11-097-143-2767	e 27675,
4	33	91.7	504	15	0-186-288-	Φ
Ç	33		506	14	-10-373-	e 18,
6	31	86.1	6	16	ι,	e 23,
7	31	86.1	6	16	-10-774-147E	e 29,
89	31	86.1	64	15	US-10-424-599-202465	e 2024
ø	31	86.1	70	15	-10-425-114-	e 394
10	31	86.1	71	16	-10-425-115-	Ø
11	31	86.1	91	15	264-049-	e 3252,
12	31	86.1	130	16	US-10-425-115-189387	e 18938
13	31	86.1	148	18	US-10-724-972A-6111	Φ
14	31	86.1	215	20	US-11-097-143-24138	e 24138,
15	31		297	9	US-09-846-808-2	2, 2
16	31	86.1	297	14	10-284-986-	2
17	21		297	14	10-369-293-	2,
	<u>د</u>		797	14	10-285-042-2	e Z, Apr
3 1	3 4	v Q	432	i a	10-501-282-433	e 4336,
2 5	ب س	86.1	456	1 6	US-10-501-282-4340	Semience 4340. An
22	31		758	10	-09-892-635A-34	ө 3 <b>4,</b> Аг
23	30	ω	83	16	US-10-425-115-251813	e 2518
24	30	ω.	104	16	US-10-425-115-248086	Ø
25	30	ω.	150	9	US-09-881-752A-8	Sequence 8, Appli
26	30	•	150	15	977-8327	e 8327, A
27	30	ω	154	16	767-701-523	Φ
28	30	ω	155	15	10-335-977-	Sequence 8328, Ap
29	30		264	16	10-425-	Φ
30	30	ω	275	15	-10-425-114-	Θ
31	30	ü	293	16	10-425-	Φ
32	. u	ω.	319	15	-10-425-114-	e 45060
ü	30	ü	324	16	10-425-115-	e 23883
34	30		428	16	-10-437-963-	Φ
, <sub>U</sub>	30		845	20	-11-097-143-1	Φ
36	22	٠.	60	16	-10-437-963-	Φ
ر د د	22	٠.		; ;	10-42	Φ
38	29		117	15	10-	e 180100
39	29	0	166	18	10-724-972A-3871	
40	29		170	16	US-10-437-963-177053	e 17705
41	29	0	174	14	-017-161	Sequence 1688, Ap
42	29		178	9	US-09-903-456-26	٨,
43	29		178	14	N	e 26,
44	29	80.6	178	14	-736-2	e 23,
45	29	0	178	17	US-10-912-446-26	26,

ALI GNMENTS

RESULT 1 US-10-774-147B-35

```
Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 35, Application US/10774147B

Publication No. US20040248255A1

GENERAL INFORMATION:

APPLICANT: POSCO

APPLICANT: POSCO

APPLICANT: POSCO

APPLICANT: PARK, Eun-Young

APPLICANT: PARK, Eun-Young

APPLICANT: SUH, Pann-Ghill

TITLE OF INVENTION: LEUKOCYTE STHMULATING PEPTIDES

FILE REFERENCE: 10050-03USA

CURRENT FILING DATE: 2004-02-05

PRIOR APPLICATION NUMBER: US/10/774,147B

CURRENT APPLICATION NUMBER: US 60/445,621

PRIOR APPLICATIO
Search completed: September 29, 2005, 12:49:48 Job time: 76.5 secs
                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 36; DB 16; Length 6; Best Local Similarity 100.0%; Pred. No. 1.7e+06; Matches 6; Conservative 0; Mismatches 0; Indels
                                                                                                                                                              1 MKYYYM 6
|||||
1 MKYYYM 6
                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                              ç
```

Gaps

0;

OM protein - protein search, using sw model

		Run on:
		September 29,
		2005,
39.814 Million cell updates/sec	(without alignments)	September 29, 2005, 12:13:23; Search time 14.5 Seconds

Title: Perfect score: Sequence: US-10-774-147B-35 36

1 МКҮҮҮМ 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters: 283416

283416 seqs, 96216763 residues

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR\_79:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score 33 33	Query Match 91.7 91.7 91.7	Query Query Match Length DB Match Length DB 91.7 416 2 91.7 501 2 91.7 504 1	- 2 2 B	ID T23383 I46701 JH0659	Description hypothetical prote cholesterol 7alpha
ωι	ω ( ω (	91.7	504	, ب	JH0659	cholestero
4	31	86.1	108	N	T17826	hypothetical prote
S	31	86.1	165	2	B97354	hypothetical prote
6	31	86.1	214	2	E46681	glutathione transf
7	31	86.1	399	2	C96908	(FS) similar to AB
8	31	86.1	406	N	A36706	transcription acti
9	31	86.1	591	_	NUZOF	glucose-6-phosphat
10	31	86.1	804	2	A37473	probable RNA polym
11	30	83.3	150	N	E64599	hypothetical prote
12	30	83.3	150	2	B71912	hypothetical prote
13	30	83.3	416	N	470393	hypothetical prote

28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29
77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	80.6	80.6	80.6	80.6	80.6	80.6	80.6
375	373	370	366	361	359	359	321	321	300	300	239	211	210	194	182	164	161	131	120	118	107	68	18	40	599	599	504	503	379	245	243
N	Ν	N	2	2	N	2	Ν	N	N	8	N	N	~	Ν	N	2	2	2	Ν	N	2	2	Ν	2	Ν.	2	2	N	2	2	N
E81442	\$54545	F84151	F83970	T38693	T21840	C69369	H69482	H45774	JW0048	JC7115	B84257	AB3178	H97149	A55756	T16519	H64329	H58932	G69442	S36306	H90457	AG1753	T15018	A24522	S26797	D98267	AD3017	S39399	A54779	S74601	S68691	в33329
- 1	hypothetical prote	response regulator	stage V sporulatio	CO		hypothetical prote	hypothetical prote	odorant receptor 3	ets transcription	ets homologous fac	H	glutathione S-tran	hypothetical prote	Λ.		^	ribosomal protein	ч	T-cell receptor de	hypothetical prote	Orf49 (bacteriopha	hypothetical prote	mitochondrial prot	Ig heavy chain V r	•	-	cholesterol 7alpha	cholesterol 7alpha	hypothetical prote		cysteine-rich secr

Search completed: September 29, 2005, 12:39:52 Job time : 15.5 secs

OM protein - protein search, using sw model

September 29, 2005, 12:11:58; Search time 70 Seconds (without alignments)
43.893 Million cell updates/sec

Title:
Perfect score:
Sequence: US-10-774-147B-35 36

1 MKYYYM 6

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : UniProt\_03:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

15	14	13	12	11	10	9	8	7	σ	σ	4	ω	2		No.	Result
31	32	32	33	33	33	33	33	33	33	33	33	33	33	33	Score	
86.1	88.9	88.9	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	Match Length	Ouerv
58	864	565	779	513	504	501	501	485	484	484	477	457	316	290	Length	
8	2	2	N	N		Н		N	N	_	2	8	N	N	BB	
Q9XQQ3	Q8TJ15	Q8PYC5	Q7RKW9	Q76CE9	CP7A_HUMAN	CP7A_RABIT	CP7A_PIG	P90914	Q8IH08	ATE1_DROME	QBN0R9	Q814H6	Q8T7L5	Q86PB1	ID	
Q9xqq3 toxoplasma	Q8tj15 methanosarc	Q8pyc5 methanosarc	Q7rkw9 plasmodium	Q76ce9 gallus gall	P22680 homo sapien	P51542 oryctolagus	046491 sus scrofa	P90914 caenorhabdi	Q8ih08 drosophila	096539 drosophila	Q8n0r9 drosophila	Q8i4h6 caenorhabdi	Q8t715 drosophila	Q86pb1 drosophila	Description	

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
86.1	86.1	86.1	1.98	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	1.98	86.1	86.1	86.1	86.1	1.98	86.1	86.1	86.1	86.1	86.1	86.1	86.1
620	591	586	579	529	509	486	470	461	409	406	400	400	399	333	314	314	311	297	297	277	261	248	239	215	203	165	108	84	76
2	,_	N	N	N	2	2	N	N	2		N	2	N	2	2	N	N	N	~	2	N	8	2	_	2	2	N	2	2
Q9W708	G6PI_PLAFA	Q7RRU9	Q8ILA4	Q7XSQ6	Q94CH1	Q8TP90	Q6L1 K5	Q84KZ3	QBN4J0	NPRA_BACST	Q80UY1	Q9CWF3	Q97MX2	Q9FK56	Q78UG0	031091	Q7Z383	Q9L6Z3	Q9ACJ4	Q8N7C5	Q8IAS2	Q8KDT6	Q8RBB5	GTT4_DROME	Q6ABR8	Q97CY9	Q84641	Q6MSF6	Q74KM6
Q9w708 xenopus lae	P18240 plasmodium	Q7rru9 plasmodium		Q7xsq6 oryza sativ	Q94chl zee mays (m	Q8tp90 methanosarc	Q611k5 picrophilus	Q84kz3 nicotiana t	Q8n4j0 homo sapien	P43130 bacillus st	Q80uy1 mus musculu	Q9cwf3 mus musculu	Q97mx2 clostridium	Q9fk56 arabidopsis	Q7bug0 rhizobium 1	031091 rhizobium 1	Q7z383 homo sapien		Q9acj4 ehrlichia c	Q8n7c5 homo sapien	Q8ias2 plasmodium	Q8kdt6 chlorobium		Q9vg96 drosophila	Q6abr8 propionibac	Q97cy9 clostridium	Q84641 paramecium	Q6msf6 mycoplasma	Q74km6 lactobacill

Search completed: September 29, 2005, 12:38:18 Job time : 70 secs